

PROPOSED ASBESTOS RESOURCE PROGRAM
COUNTY BOARD OF HEALTH FOR LINCOLN COUNTY, MONT.

ENGINEERING SOLUTIONS. ADVANCING BUSINESS.



PROPOSED ASBESTOS RESOURCE PROGRAM CITY-COUNTY BOARD OF HEALTH FOR LINCOLN COUNTY, MONTANA

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SUBMITTED BY: Trihydro Corporation

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List of Acronyms

ABE Activity-Based Exposure

ABS Activity-Based Sampling

ACM Asbestos Containing Material

ARP Asbestos Resource Program

BNSF Burlington Northern Santa Fe Railway

BOH Board of Health

CERCLA Comprehensive Environmental Response, Compensation, and Liability Act

ERS Environmental Resource Specialist

FTE Full-Time Employee Equivalent Factors

IC Institutional Control

LA Libby Amphibole

LAIC Libby Amphibole Institutional Control

LUR Land Use Restriction

MDEQ Montana Department of Environmental Quality

MDT Montana Department of Transportation

MT Montana

NPL National Priority List

OU Operable Unit

O&M Operations and Maintenance

ROD Record of Decision

SAB Scientific Advisory Board

USEPA United States Environmental Protection Agency

USFS United States Forest Service



1.0 INTRODUCTION

The Libby Asbestos Site (Site) was established as a National Priority List (NPL) Superfund site by the U.S. Environmental Protection Agency (USEPA) in 2002. The USEPA and the Montana Department of Environmental Quality (MDEQ) are in the process of investigating and remediating the Site. Final remedies have not yet been identified or implemented. The City-County Board of Health (BOH) for Lincoln County, Montana is concerned with the risks of exposure to asbestos until the final remedies are in place. Therefore, the BOH is developing an Asbestos Resource Program (ARP) to reduce human health exposure and risks associated with asbestos within the Site and the surrounding area. The BOH is using a grant provided by the USEPA to develop and implement the ARP. The purpose of this report is to help define the ARP and provide recommendations for implementation.

The ARP is built on three pillars: education, resources, and initiatives. The education pillar is designed to educate the public regarding the risks associated with exposure to asbestos and how to reduce those risks. The resources pillar is designed to provide various resources to help the public manage the risks associated with asbestos. Finally, the initiatives pillar is designed to revise existing or develop new codes, ordinances, and regulations, for the purpose of reducing or preventing the public's risk of exposure to asbestos.

1.1 PROJECT DESCRIPTION

The Site was established as a NPL Superfund site by the USEPA in 2002 due to asbestos-related human health concerns associated with the mining and processing of vermiculite ore from geologic deposits in the Kootenai River Valley. The vermiculite ore contains a unique form of asbestos know as Libby Amphibole (LA) asbestos. LA asbestos fibers have been shown to be prevalent throughout the Kootenai River Valley in Lincoln County, including the City of Libby and the City of Troy. LA asbestos has been found in the soil and air, as well as building insulation and related products. The USEPA has established eight operable units (OUs) to evaluate the extent of LA asbestos contamination and determine appropriate remedial activities to protect human health and the environment. The location and extent of the OUs are shown on Figure 1.

The USEPA is in the process of completing a toxicity study for LA asbestos, which will be used to prepare a site-specific risk assessment, and ultimately final remedies for the Site. Institutional Controls (ICs) will be used to address exposures to residual LA asbestos remaining after final remedies selected and completed by the USEPA and the MDEQ. Final remedies are currently in place for OU1 and OU2; however, ICs for these remedies are still being developed. The ARP is currently being developed to address the public's exposure to asbestos until final remedies are



implemented by USEPA and MDEQ for the entire Site. Once those final remedies are in place, the ARP may be expanded and incorporated into the USEPA's and the MDEQ's final remedies as ICs.

The BOH created an ARP Program Manager position under the Lincoln County Environmental Health Department. The BOH also retained a consultant (Trihydro Corporation) to develop the ARP framework and components. The ARP Program Manager and consultant comprise the Libby Amphibole Institutional Controls (LAIC) Team, which has prepared the recommendations contained in this report. As part of the ARP development process, the following tasks have been completed or are otherwise ongoing:

- Evaluation of existing local land use restrictions that currently pertain or could pertain to LA asbestos exposure
- Evaluation of the activity-based sampling and potential LA asbestos exposure
- Continuation and expansion of efforts to educate the public regarding the remaining risks associated with exposure
 to LA asbestos, provide resources necessary to minimize exposure/risk, and implement initiatives to protect the
 public from asbestos remaining at the Site

1.2 ARP REPORT ORGANIZATION

This *Proposed Asbestos Resource Program Report* (ARP Report) has been prepared on behalf of the BOH, and includes the recommended framework and components to establish the ARP as an interim measure for the Site. This ARP Report is organized as follows:

- Section 1.0 "Introduction"
- Section 2.0 "Site Description and Project Background"
- Section 3.0 "Asbestos Resource Program Framework"
- Section 4.0 "Asbestos Resource Program Development Summary"
- Section 5.0 "References"

Summaries of the components associated with each ARP pillar are provided as Appendices A through C, and include additional information regarding the purpose, implementation strategy, proposed enforcement mechanism for initiative components, budget considerations, future development, and effectiveness criteria for each component. Recommendations for revisions to existing ordinances, regulations, and codes are provided for components associated with the initiatives pillar.

Two previous reports were prepared as part of the ARP development process, and are referenced in this ARP report:



- The Land Use Restriction Report (LUR Report) describes existing land use restrictions such as ordinances, regulations, and codes that address, to some degree (as explained in the report), exposure to LA asbestos (Trihydro 2012a). The LUR Report includes considerations for revisions to improve the effectiveness of existing land use restrictions.
- The Activity-Based Exposure Levels Report (ABE Report) summarizes potential exposure scenarios and existing data for the Site (Trihydro 2012b). The ABE Report is based on documents prepared by, or on behalf of, the USEPA and the MDEQ as part of the Superfund process for the Site

1.3 REPORT LIMITATIONS

Limitations of this report include:

- Risks have not been quantified. The USEPA predicts that the LA asbestos toxicology report will be finalized in mid- to late-2013, following final adoption of the Scientific Advisory Board (SAB) comments and modifications. Upon finalization of the LA asbestos toxicology report, the USEPA will complete a comprehensive risk assessment for the majority of the site (including OU4 and OU7). Following the USEPA's release of the toxicity report and risk assessment, the BOH will need to review the potential exposure scenarios and risks to determine if the interim ARP components are necessary or adequate. Depending on the results of the BOH's review, changes to the ARP components may be warranted.
- The USEPA is continuing to collect and analyze data for the site, and is expected to prepare a report on the nature and extent of LA asbestos contamination sometime in 2013. If the nature and extent data collected and analyzed by the USEPA results in changes to the Site and/or OU boundaries, changes to the ARP District boundaries may be warranted.
- This ARP Report provides estimates of staffing needs (as a percentage of a full time employee or FTE) and associated program resources, to develop and implement the ARP. Staffing needs and program resource estimates are based on current costs and assumptions associated with the recommended components. The cost of an FTE (i.e., salary, benefits, overhead) and other program resources are left to negotiations between the BOH and Lincoln County under their February 8th, 2012 Activity Support Agreement. Staffing needs and program resource estimates are anticipated to be refined and revised as the ARP develops, and in response to potential shifts in priorities.
- This ARP Report lists future program development for components that are currently being facilitated by the USEPA and MDEQ (e.g., Environmental Resource Specialist, UDIG, and property status database/GIS management), and therefore are not currently included in the ARP. It is anticipated that these components will be incorporated into the ARP once the USEPA and MDEQ implements the remedies for the Site. Estimated staffing and resources associated with future program development are not provided.



2.0 SITE DESCRIPTION AND PROJECT BACKGROUND

2.1 SITE DESCRIPTION

General Site information is included in Appendix D. The NPL Superfund Site boundary, as established by the USEPA, is shown on Figure 1. Also shown on Figure 1 are the eight OUs defined by the USEPA. The OUs of greatest concern for the BOH include OU4 and OU7. OU4 includes the City of Libby, Montana and the surrounding area. OU7 includes the City of Troy, Montana and the surrounding area. The USEPA is currently evaluating recent nature and extent sampling results that may necessitate changes to the boundaries for the OUs and/or the NPL Superfund Site.

Since 2002, over 3,500 properties in the Libby and Troy areas have been evaluated for the presence of LA asbestos. Removal actions have been completed at over 1,700 residential and commercial properties located throughout the NPL Superfund Site boundary as of the third quarter of 2012. The USEPA is continuing to investigate properties in Libby to identify, and where appropriate, remove LA asbestos. The MDEQ is conducting a similar investigation and removal program in Troy. Both the USEPA and the MDEQ are working toward final remedies for all eight OUs at the Site. The USEPA and MDEQ will select final remedies for the site that are anticipated to include ICs to limit the public's potential exposure to LA asbestos at the Site.

2.2 PROJECT BACKGROUND

The LUR Report (Trihydro 2012a) and the ABE Report (Trihydro 2012b) were prepared to support the development of the ARP. The following information is provided to summarize the findings of the LUR and ABE Reports.

2.2.1 EXISTING LAND USE RESTRICTIONS REPORT SUMMARY

The LUR Report (Trihydro 2012a) summarized existing LURs and their potential applicability to the ARP. LURs are a common IC tool that may be adopted by the BOH, in full or in revised versions, as ARP initiatives. LURs utilize a variety of enforceable regulatory mechanisms (e.g., laws, ordinances, regulations, codes, restrictions, guidelines, and permitting systems) to protect public health and the environment by reducing the risk of exposure.

Table 2-1 summarizes existing LURs related to LA exposure, whether the LURs address exposure, and considerations for revisions. The proposed considerations are addressed by Component I:1 "Update Existing Codes/Ordinances/Regulations Initiative of the ARP initiatives pillar, and are discussed in Section 3.3 of this report. Appendix E contains a list of the laws, ordinances, regulations, codes, resolutions, and guidance reviewed for the LUR report, and summarizes considerations for the relevant LURs currently being implemented by Lincoln County, the City of Libby, and the City of Troy.



2.2.2 ACTIVITY-BASED EXPOSURE LEVELS REPORT SUMMARY

The ABE report (Trihydro 2012b) summarizes LA asbestos exposure and risk data, as reported in the USEPA Site documents through June 2012. The ABE report also includes exposure and risk concerns that could be relevant to the development of the ARP. The scope of the ABE report is limited by the fact that the USEPA's activity-based sampling efforts are ongoing, and the LA asbestos toxicity factor and risk assessment calculations have not yet been finalized (Trihydro 2012b).

Table 2-2 summarizes ABS scenarios by operable unit, status of sampling, and results. The BOH may use the information in the ABE Report to develop or refine the education, resources, and initiatives pillars for the ARP. The pending results of the ARP outreach survey may also be used to identify potential data gaps and public perceptions that may warrant revisions or additions to some ARP components. Appendix E provides a summary of the considerations that may be used to address potential exposure and human health risks associated with LA asbestos at the Site.



3.0 ASBESTOS RESOURCE PROGRAM FRAMEWORK

The purpose of the ARP is to educate the public regarding the remaining risks of asbestos exposure; provide resources to manage the risks associated with asbestos exposure; and implement initiatives to reduce or prevent the risk of asbestos exposure. The education, resources, and initiatives pillars are composed of multiple components to address specific asbestos risk/exposure scenarios. Although the ARP will be comprised of three separate pillars, the three pillars are designed to provide comprehensive solutions to common risk/exposure scenarios. In some cases, variations of components in one pillar are reflected in components for another pillar.

In addition to establishing the three pillars of the program, a new ARP District will be defined. The ARP District is comprised of the portions of Lincoln County that encompass the Superfund Site boundary, as well as additional adjacent portions of Lincoln County. The specific township, ranges, and sections that compose the ARP District are defined in Appendix C (Initiative I:2). The ARP District boundary, as shown in Figure 2, will be the area for which the ARP initiative pillar components (e.g., ARP Permit Program) will be applicable. The ARP resources pillar components will be available to those within the ARP District, but may also be provided to interested parties outside the ARP District on a case-by-case basis. ARP educational pillar components will be available to interested parties throughout Lincoln County and beyond, but preference will be given to those within the ARP District.

Table 3-1 lists the potential risk/exposure scenarios identified in the ABE report (Trihydro 2012b), the three ARP pillars, the components of each pillar, and the correlations between the ARP components and the risk/exposure scenarios they are designed to address. The risk reduction strategy for each component is also identified in Table 3-1. The risk reduction strategies generally indicate how the ARP components will address the associated risk/exposure scenarios, and include:

- Inform the public regarding the potential exposure risk/exposure scenarios
- Mitigate or reduce the potential risk/ exposure scenario
- Prevent or eliminate the potential risk/exposure scenario

Some of the ARP pillar components are expected to inform or mitigate potential asbestos exposure, while other pillar components are expected to prevent asbestos exposure. Once the USEPA completes the risk assessment and develops final remedies for the majority of the OUs, additional initiative components may be developed to prevent potential exposure scenarios.



Summaries of the three ARP pillars, the associated components, and annual budget item estimates are provided in the following sections. Projections of annual staffing resource requirements are provided as full-time employee equivalents (FTEs) rather than as actual salary and benefits. To assist the existing ARP Program Manager (1.0 FTE) with management responsibilities, portions of the existing Environmental Health Director's time (0.25 FTE) and the existing Environmental Health administrative assistant's time (0.25 FTE) are allocated to the ARP. Estimates of additional annual program resources required to implement and maintain the individual pillars are summarized in Table 4-1. The annual budget item estimates are generally expected to be representative of the initial and long-term needs of the ARP. Initially, a higher percentage of the annual budget may be allocated to program development rather than program implementation. Over the first year, resources spent on program development are expected to shift to program implementation. Additionally, there may be the need for internal reallocation of FTE resources from one component to another after the first year of the ARP.

The ARP will incorporate processes and criteria to evaluate the overall effectiveness of the program, as well as the effectiveness of individual components. As the ARP matures, data on the effectiveness of the program and individual components may be used to reallocate program resources. In some cases, components may be reduced or phased out. In other cases, programs may be expanded or redesigned to meet the public's needs.

3.1 EDUCATION PILLAR

Education of the local communities will be a critical pillar of the ARP. The education components are designed to inform the public regarding remaining risks of exposure to LA asbestos, and promote lifestyle changes to reduce the risk of long-term exposure. The ARP will provide educational materials on both LA asbestos and asbestos containing materials (ACM) to the citizens of Lincoln County and beyond (e.g., tourists, new residents, out-of-area contractors, businesses interested in moving into the area, presentations at conferences and events).

3.1.1 EDUCATION PILLAR COMPONENTS

The education pillar is comprised of eleven components (E:1 through E:11). The majority of the components in this pillar use the risk reduction strategies of informing the public and mitigating the severity of exposure. Collectively, the education components address all of the potential occupational and residential exposure scenarios identified in Table 3-1. The education pillar of the ARP includes the following components:

- E:1 Landscape/Garden Extension Program Education
- E:2 Air Monitoring Extension Program Education
- E:3 ARP Booth and Community Brochure Education



- E:4 Newcomer Education
- E:5 External Education
- E:6 K-12 Student Education
- E:7 Early Childhood Education
- E:8 Outdoor Recreational Awareness Education
- E:9 Public Information Database Education
- E:10 Occupational Awareness Education
- E:11 MDEQ Asbestos Program Education

Because education is a critical pillar of the ARP and potentially easier to develop and implement than the other two pillars, the education components are recommended to be implemented as soon as possible. Appendix A contains information sheets for each education component, including detailed descriptions of the purpose, implementation strategy, budget considerations, future development, and effectiveness criteria.

3.1.2 EDUCATION PILLAR BUDGET CONSIDERATIONS

The education pillar and associated components should be managed by an ARP Education Coordinator (1.0 FTE). The ARP Education Coordinator will be responsible for developing and disseminating education materials for each component to the appropriate audiences. The ARP Education Coordinator will take the lead role in staffing booths, presenting classes, and coordinating with other government and public entities where programs overlap. The ARP Education Coordinator will also coordinate with the USEPA and the MDEQ to provide the public with access to property status data contained within the USEPA and the MDEQ property status databases.

The allocation of an additional staff resource (0.6 FTE) is also recommended to support the ARP Education Coordinator. Typical duties may include the graphic design of education materials, as well as general administrative support. Once the majority of the initial education components are developed, this staff resource may be reallocated to provide support (e.g., inspections and data management) for the resources and initiatives pillars.

In addition to the staff resources (1.6 FTE) recommended above, the following annual budget items are also recommended to support the development and implementation of the education pillar:



- Overhead items such as: advertising for classes/events; printing of brochures and class materials; outreach booth
 material giveaways; bulk mailing permit and routine postage; web site preparation and maintenance; event
 registration costs; and travel to events.
- Ambient air monitoring equipment (both high flow and low flow rate systems)
- Air and soil laboratory analysis.

Future development of the education pillar may include assuming responsibility for the following activities, which are not included in the estimated budget considerations summarized above:

- Ambient air monitoring currently performed by the USEPA and the MDEQ
- Long-term operation and maintenance of the databases currently maintained by the USEPA

3.2 RESOURCES PILLAR

The purpose of the resources pillar is to provide resources for managing the risks associated with asbestos exposure within the ARP District. Resources may be provided to other parts of Lincoln County on a case-by-case basis. Examples of resources include:

- Material resources such as HEPA filtration vacuums and replacement filters
- Approved asbestos-free fill and topsoil
- Monetary resources such as rebates and funds for paving
- Assistance resources such as contractor training and prescription drug assistance
- Support for Economic Development

The resources pillar is designed to demonstrate that the BOH is committed to the health and welfare of local residents and businesses, and that they are not alone in shouldering the burden of the environmental impacts from the remaining asbestos. Providing resources is also anticipated to: stimulate existing public health awareness incentives (which are being implemented by the USEPA and the MDEQ); encourage and reinvigorate the public to adapt lifestyle changes to minimize their exposure to asbestos; and stimulate participation in the informational ARP Permit Program.

3.2.1 RESOURCES PILLAR COMPONENTS

The resources pillar is comprised of eleven components (R:1 through R:11). The majority of the components are effective at either mitigating and/or preventing exposure to LA asbestos. Collectively, the resource components



address all of the potential occupational and residential exposure scenarios identified in Table 3-1. The resource pillar of the ARP includes the following components:

- R:1 Ground Surface Improvement Resources
- R:2 Dust Prevention Resources
- R:3 Landscape Resources
- R:4 Early Childhood Education Outreach Resources
- R:5 Community HEPA Vacuums/Replacement Filter Resources
- R:6 HEPA Filter Systems Resources
- R:7 Contractor Training Resources
- R:8 Accredited Contractors Rebate Resources
- R:9 Prescription Information Assistance Resources
- R:10 Economic Development Liaison Resources
- R:11 Future Program Development

Appendix B contains information sheets for each resources component, including a detailed description, purpose, implementation strategy, budget considerations, future development, and effectiveness criteria.

3.2.2 RESOURCES PILLAR BUDGET CONSIDERATIONS

The resources pillar and associated components should be managed by an ARP Resources Coordinator (1.0 FTE). The ARP Resources Coordinator will be responsible for securing applicable materials, coordinating with all parties necessary to develop the resources, developing an allocation plan, and ensuring that resources are effectively disseminated. The ARP Resources Coordinator will take the lead role in coordinating with all other parties necessary to develop the resources in terms of professional expertise, certifications, and materials.

The allocation of an additional staff resource (0.3 FTE) is also recommended to support the ARP Resources Coordinator. Typical duties may include being an economic development liaison with businesses interested in moving into the ARP District (component R:10), as well as general administrative support. Economic development liaison activities may include supporting expansion of existing local businesses, and encouraging new business to locate to the area. Consideration may be given to have the additional staff resource eventually assume responsibility for managing



some of the existing resources currently provided by the USEPA, such as providing asbestos-free fill and topsoil, and assisting with the ARP Permit Program (ERS, UDIG).

In addition to the staff resources (1.3 FTE) recommended above, the following annual budget items are also recommended to support the development and implementation of the resources pillar:

- A contract instructor to teach proposed courses under component R:7, such as HAZWOPER and annual refreshers.
- Contract medical specialists (e.g., doctor, nurse, pharmacist, insurance specialist) to implement those portions of component R:9 that require medical expertise.
- Funding to address components R:7 and R:9, which include a rebate or partial subsidy for certain activities.
- Fixed cost items such as: grass/flower seed mixes; approved asbestos-free fill and topsoil; and garden/landscape supplements; approved asbestos-free replacement groundcover for daycare facilities; HEPA filtration vacuums and vouchers for HEPA filters; and paving or hardscape materials to cover high-use recreational areas with a greater potential for exposure.
- Overhead items such as: advertising of resources; printing of brochures and class materials; bulk mailing; rental of storage area or purchase of storage sheds; vehicle and trailer(s); and travel to distribute resources.

Future development of the resources pillar may include assuming responsibility for the following activity, which is not included in the estimated budget considerations summarized above:

Distribute resources currently provided by the USEPA (e.g., asbestos-free fill and topsoil sources).

3.3 INITIATIVES PILLAR

The initiatives pillar is designed to revise existing LURs and develop new LURs for the purpose of reducing or eliminating potential exposures to asbestos. Although the education and resources pillars are crucial to the success of the ARP, the initiatives pillar provides the foundation of the program by establishing basic regulatory programs and enforcement provisions. Initial responses from the ongoing ARP outreach survey indicate that the public supports some level of regulation and enforcement to ensure that the activities of others are not cross contaminating and creating asbestos exposure pathways within the District. The initiatives are designed to be voluntary and provide incentives, but also contain enforcement mechanisms should they be necessary to protect public health.

The main component of the initiatives pillar is a simple, no-cost, ARP Permit Program designed to provide useful information to the public. Permits will be required for all activities with the potential to expose the public to asbestos.



The ARP Permit Program includes a streamlined permit application process that does not require an unreasonable amount of time or money to complete. The associated review and approval process allows the ARP to provide useful information regarding best management practices, and provides a tracking system to maintain accurate records regarding what has or has not been done with respect to asbestos at individual properties.

A new ARP public nuisance regulation is proposed to address public health concerns with respect to LA asbestos. The new ARP public nuisance regulation is modeled after the existing Lincoln County Community Decay Ordinance (Health and Environment Regulations, Chapter 4).

3.3.1 INITIATIVES PILLAR COMPONENTS

The initiatives pillar is comprised of six components. The majority of the components are effective at either informing and/or preventing exposure to LA asbestos. Collectively, the resource components address most of the potential occupational and residential exposure scenarios identified in Table 3-1. The initiatives pillar of the ARP includes the following components:

- I:1 Update Codes/Ordinances/Regulations Initiative
- I:2 Asbestos Resource Program Permit Initiative
- I:3 ARP Contractor Certification Initiative
- I:4 Open Space Recreation Initiatives
- I:5 Ban Vermiculite Sales Initiative
- I:6 Public Nuisance Initiative

Appendix C contains information sheets for each initiative component, including a detailed description, purpose, implementation strategy, enforcement, budget considerations, future development, and effectiveness criteria.

3.3.2 INITIATIVES PILLAR BUDGET CONSIDERATIONS

The initiatives pillar and associated components should be managed by an ARP Initiatives Coordinator (1.0 FTE). The ARP Initiatives Coordinator will be responsible for working with the City of Libby, the City of Troy, and other Lincoln County departments to update, revise, and develop necessary ordinances, regulations, codes, and supporting documents. The ARP Resources Coordinator will take the lead role in establishing and implementing the ARP Permit Program (Initiative I:2).



The allocation of an additional staff resource (0.6 FTE) is also recommended to support the ARP Initiatives Coordinator. Typical duties may include conducting inspections for the ARP Permit Program, overseeing the GIS/database tracking for the ARP Permit Program, and completing air/soil sampling events for the ARP.

In addition to the staff resources (1.6 FTEs) recommended above, the following annual budget items are also recommended to support the development and implementation of the initiatives pillar:

- Fixed cost items such as paving or hardscape materials to cover recreational trails and parking areas, as described in initiative I:4.
- Overhead items for the program such as: advertising of regulatory changes; completion of open space projects;
 contractor certification classes; printing of permit applications and associated information and contractor
 certification materials; mailing; inspector travel; and personal protective equipment (PPE).

Future development of the initiatives pillar may include the following activities, which are not included in the estimated budget considerations summarized above:

- USEPA's Environmental Resource Specialist program
- USEPA's membership in the UDIG program.

3.4 ARP PILLAR SUMMARY

In summary, the ARP should be staffed by an ARP Program Manager, an ARP Education Coordinator, an ARP Resources Coordinator, an ARP Initiatives Coordinator, and additional staff support, for a total of 6 FTEs. Support staff will be utilized by all three ARP pillars to accommodate variations in workloads. Existing staff resources provided by the Lincoln County Environmental Health Director and administrative staff are included in the 6 FTE recommendation. A proposed organizational chart for ARP staff is shown in Figure 3.

The ARP FTE and annual budget item estimates may be used as a starting point for the BOH to prepare a complete ARP operating budget, and then negotiate funding with the USEPA. Once the USEPA finalizes the toxicology values and associated risk assessment for the Site, the budget requirements may need to be revised if potential high risk/exposure activities are added to or removed from the current component matrix. In addition, ongoing data collection on the nature and extent of the LA asbestos may result in expanded or reduced Site boundaries, which could also affect the budget estimate. Therefore, the ARP should negotiate an initial annual budget with the USEPA, and then use program effectiveness data and public input to refine future budget estimates.



4.0 ARP DEVELOPMENT, IMPLEMENTATION, AND EVALUATION STRATEGIES

This section outlines strategies to support the overall development, implementation, and evaluation of the ARP education, resources, and initiatives pillars. The pillars are designed to complement each other, and collectively address the exposure and human health risks associated with LA asbestos within the proposed ARP District. Although Section 3 of this report discussed the three pillars separately, the development and implementation of the three ARP pillars are recommended to be completed concurrently to provide a comprehensive, consistent, and coordinated strategy to the public.

4.1 PROGRAM DEVELOPMENT

The following steps are recommended for the BOH to pursue development of the ARP:

- Identify ARP Components This report identifies three pillars and 28 components for the ARP. The BOH should determine which of the proposed components to include in the ARP. The LAIC Team recommends that all 28 components be included in the ARP.
- Establish ARP The BOH should formally establish the ARP, associated pillars, and components through
 resolution or other appropriate legal mechanism. The initiatives pillar should include language to define the ARP
 District and associated ARP regulations (recommendations provided in Appendix C).
- Obtain Staff and Budget Resources The BOH has already contracted with Lincoln County for the Environmental Health Director (0.25 FTE) and administrative support (0.25 FTE) to support the ARP Program, and the ARP Program Manager (1.0 FTE) has been hired. Once the ARP is formally established, the BOH should obtain the necessary funding from the USEPA, and contract with Lincoln County to hire the additional staff required to implement the three pillars.

The draft version of this report was reviewed and approved by the BOH, with comments to address, on December 5, 2012. The BOH comments were addressed and the revised report was released for public review and comment on December 7, 2012. The report was available for public review and comments for 30 days, from December 7, 2012 through January 7, 2013. The BOH also held a public meeting on December 28, 2012 to obtain public comments. Public comments were reviewed and addressed in this report. Public comments and the LAIC Team responses are included in Appendix F.



4.2 PROGRAM IMPLEMENTATION

Once the BOH has completed the ARP development, the following steps are recommended for the ARP program staff to implement the ARP:

Education Pillar

- Prepare education component materials (e.g., booths, brochures, presentations)
- Contact potential stakeholders that may be interested in the education components, introduce them to the ARP,
 extend offer to facilitate use of education components, and provide examples of available materials
- Follow-up with potential stakeholders and schedule opportunities to disseminate education components
- Disseminate education components and solicit feedback
- Document use of education components, review feedback, and update education components based on feedback

Resources Pillar

- Compile existing resource components
- Develop resource components that do not currently exist
- Contact potential stakeholders that may be interested in the resource components, introduce them to the ARP, and provide information on how to use the available resource components
- Disseminate resource components and solicit feedback
- Document use of resource components, review feedback, and adjust resource components based on feedback

Initiatives Pillar

- Coordinate with affected city and county departments on the proposed ordinances/regulations/codes/guidance
- Draft and codify proposed ordinances/regulations/codes/guidance
- Solicit input for affected city, county or state agencies, and revise as necessary
- Complete legal process for adopting codes/ordinances/regulations/guidance
- Prepare and disseminate information to the public regarding new or revised codes/ordinances/regulations/ guidance
- Develop and provide ARP asbestos contractor operating certification program
- Develop the ARP permit process, review and issue ARP permits, and solicit feedback



- Conduct inspections and provide technical assistance, as requested by ARP permit holders, and solicit feedback
- Document use of initiative components, review feedback, and revise initiative components based on feedback

Implementation of the ARP is expected to occur in two phases, the interim and future development. Once the final remedies and ICs are completed by the USEPA, the ARP may continue as-is, or evolve to accommodate the final remedies and ICs. The following information is provided to generally describe the two phases of implementation.

4.2.1 INTERIM IMPLEMENTATION

The implementation of the ARP during the interim period will require coordination with entities currently participating on the BOH (Lincoln County Commissioners and selected departments, City of Libby, and the CARD Clinic), as well as other entities such as the City of Troy, the USEPA, the MDEQ, and other existing Lincoln County departments. Implementation of the program will be accomplished through the combined effort of executing each component chosen by the BOH.

ARP components that are not currently being offered by city, county, state, or federal agencies may be implemented directly by ARP staff during the interim phase. However, implementation of ARP components that are currently offered in whole or in part by other city, county, state, or federal agencies will need to be closely coordinated with the appropriate agency to avoid duplication of efforts, conflicting messages, or confusion regarding who the public needs to contact for more information. In some cases, ARP staff may be used to support the work of other agencies. In other cases, ARP staff may offer to take the lead in implementing changes to revise or enhance existing education, resource, or regulatory programs. The ARP pillar coordinators should contact agencies that may be associated with the ARP components, and discuss component-specific implementation strategies, resources, and schedules that will be beneficial to everyone.

4.2.2 FUTURE PROGRAM DEVELOPMENT

Although future program development was discussed in previous sections, this section summarizes those future programs which may have a significant impact on the ARP in terms of staff, resources, and expertise. Future program development includes, but is not limited to, the following items that the ARP anticipates managing once the final remedies are completed and ICs are defined:

UDIG notification: The USEPA is currently a member of UDIG and is notified when there is a request for UDIG services within the area of concern. When USEPA is ready to terminate their membership, the ARP should obtain



- membership and assume responsibility for this role. Upon the ARP's notification of a UDIG request, the requestor would be notified of the requirement to obtain an ARP Program Permit. This program could potentially be managed by the existing ARP Permit Program staff since it would tie directly into the permit process.
- ERS: This program is currently facilitated by the USEPA and provides a local asbestos specialist to answer questions, conduct inspections, and assist in removal activities for LA asbestos within the USEPA NPL Site boundary. The ERS program is recommended to be incorporated into the ARP Permit Program to continue providing those services within the ARP District. The ARP will need funding to hire outside contractors for the purpose of performing asbestos removal actions. This program will require budget allocations for additional staff and/or contractors, training, transportation, and disposal options. The USEPA has committed to continued funding of removal actions.
- Air Monitoring Program for LA asbestos: Currently the USEPA conducts ambient air monitoring in the City of Libby and the MDEQ conducts ambient air monitoring in the City of Troy. This program is recommended to be managed by the education pillar of the ARP. Consideration should be given to having the ARP assume responsibility for maintaining the current monitoring devices and laboratory contracts. The ARP is currently considering expansion of the existing program to address areas with activities where there is the potential to generate significant dust (demolition activities, fires, landslides, construction sites, etc.). This program will require budget allocations for staff training, sampling and analytical, health and safety, and air monitoring equipment. Future program development is recommended to be implemented by the education pillar as described in the information sheet for E:2 located in Appendix A.
- Approval and Distribution of Asbestos-Free Fill and Topsoil: This program is currently facilitated by the USEPA. The program includes identification and sampling of approved asbestos-free fill materials and provides public assistance in obtaining the approved fill. This program is recommended to be incorporated into the resources pillar of the ARP. This program will require funding for sampling of fill and topsoil materials, mining/loading, transportation, and unloading of the material.
- Property Status Database Management: This program is currently managed by USEPA for the Libby area and the MDEQ for the Troy area. The database management and dissemination to the public are recommended to be managed through the education pillar as described in information sheet E:9, located in Appendix A. Coordination with the USEPA/MDEQ should include physical relocation of the database to the county system, and training of county staff on use and maintenance of the database. This program will require funding for database management, maintenance, software training, and for a process to provide property status information to the public in regards to land transactions.



4.3 EFFECTIVENESS CRITERIA

The effectiveness of the ARP is recommended to be measured periodically to ensure that the ARP components are effective in reducing or eliminating potential exposure to LA asbestos. The effectiveness review process will also ensure that the ARP's funding is allocated such that effective components receive adequate funding, ineffective or obsolete components are removed, and additional components are developed to address new priorities. Recommended options for ARP program review are provided below. In addition, the information sheet for each component included in Appendices A through C lists effectiveness criteria specific to each component.

- The ARP should conduct an annual review/audit of the program and include:
 - Outreach surveys
 - Cost benefit evaluations for each component
 - Statistics on number of people utilizing each component (e.g., classes attended, vacuums supplied, and assistance requested)
 - Statistics on regulatory compliance
 - Comparison of estimated risk level for activity determined from recent data to implementation effort of the associated component
 - Number and acreage of areas paved or hardscaped
 - Trends in ambient air monitoring data
 - Public health trends using data from the Center for Asbestos Related Disease (CARD)
 - Number of ARP certified contractors and MDEQ ACM accredited inspectors
- The ARP should coordinate with the USEPA on the preparation of their 5-year reviews of the remedies. The USEPA is required by CERCLA to review remedial actions no less than every 5 years to assure that the remedy is, or will be, protective of human health and the environment. The 5-year reviews include any additional information related to human health or ecological risk that is developed during the period covered by the review. Since many of the ARP components are designed to act as ICs for the final remedies, an evaluation of the overall effectiveness of the remedy is directly tied to the effectiveness of the components. The ARP will coordinate with the USEPA to participate in the 5-year review process for at least those portions of the remedy that include ICs.
- The ARP should conduct annual surveys with 20% of the property owners where removal actions have occurred so that every property with removal actions is contacted over a 5-year period. Follow-up for removal actions should include evaluating the level of satisfaction with removal actions, gauging the need for additional resources, and suggestions for improvements of the process. The ARP should also follow-up with at least 10% of the properties



where ARP Program Permits have been issued. Follow-up for the ARP Permit Program should include evaluating satisfaction with the permit process (e.g., time required, usefulness of the permit, and suggestions for how to improve the permitting process.)

5.0 REFERENCES

- Trihydro Corporation (Trihydro). 2012a. Land Use Restrictions Report, Asbestos Resource Program for Libby Amphibole, City of Libby, City of Troy, and Lincoln County, Montana. Helena, Montana. June 27, 2012.
- Trihydro. 2012b. Activity-Based Exposure Levels Report, Asbestos Resource Program for Libby Amphibole, City of Libby, City of Troy, and Lincoln County, Montana. Helena, Montana. June 27, 2012.
- United States Environmental Protection Agency (USEPA). 2000. Fibrous Amphibole Contamination in Soil and Dust at Multiple Locations in Libby Poses an Imminent and Substantial Endangerment to Public Health: an Addendum to my Memorandum of May 10, 2000. Available from:

 http://www.epa.gov/region8/superfund/libby/RiskMemo2ImminentEndangerment2.pdf.
- USEPA. 2011. *External Review Draft* Toxicological Review of Libby Amphibole Asbestos, In Support of Summary Information on the Integrated Risk Information System (IRIS). August, 2011. Available from: http://cfpub.epa.gov/ncea/iris_drafts/recordisplay.cfm?deid=235092.
- USEPA. 2012. Region 8 Superfund Libby Asbestos: ABCs of Asbestos. Available from: http://www.epa.gov/region8/superfund/libby/abcasbestos.html.



TABLES



TABLE 2-1. LA ASBESTOS EXPOSURE SOURCES AND RELATED REGULATIONS LINCOLN COUNTY, MONTANA

Source	Applicable Regulation	Effect of Regulation on LA Asbestos Exposure	Considerations
Soil	Subdivision Regulation*, Preliminary Investigation	LA asbestos is not addressed. Requires developer to perform due diligence with County Clerk and Recorders Office and Department of Environmental Health.	Consider expanding the scope of the due diligence process to specifically include identification of potential presence of LA asbestos that may trigger additional application requirements. The developer could be directed to the property status database developed by the EPA for Libby, the TOAD for Troy, or the ERS program if outside the coverage of these databases.
	Subdivision Regulation*, Pre- Application Meeting and Form	LA asbestos is not addressed. Requires developer to have a preapplication meeting with the Planning Department.	Consider expanding the scope of the preliminary application information, form, and pre-application meeting to specifically include potential LA asbestos issues.
	Subdivision Regulation*, Environmental and Community Assessment	LA asbestos is not addressed. Requires a questionnaire (Environmental and Community Assessment) and report which address impacts and proposed mitigation for a number of criteria, including public health	Consider expanding the scope of the questionnaire and report to include specific measures for mitigating the potential exposure and release of LA asbestos during the initial subdivision development, as well as subsequent lot development activities.
	Subdivision Regulation*, Fire Protection	Require subdivisions to be planned, designed, constructed, and maintained to reduce the risk of fire.	No considerations for revisions are proposed.
	Subdivision Regulation*, Water and Sanitation Report	LA asbestos is not addressed. Requires a Water & Sanitation Report, including information regarding the proposed water supply systems.	Subdivisions on public water systems are protected. Consideration may be given to regulating individual wells.
	Wastewater Treatment and Disposal Regulation; Regulation No. 3	LA asbestos is not addressed. Requires permits for all systems and licenses for installers.	Consider educational opportunities, best management practices, or regulations. Potential subject areas may include occurrence, identification, and hazards of LA asbestos; installation and repair of wastewater systems in areas containing LA asbestos; and operation and maintenance of wastewater systems in areas containing LA asbestos.
	County Health Regulations, Solid Waste Regulations	LA asbestos is not addressed; however, the Libby landfill accepts asbestos containing materials. Some solid waste may be buried in other locations and used as fill material.	Consider revising the regulation allowing burial of solid waste on a case-by-case basis to either exclude the disposal of asbestos containing materials, or impose requirements to control potential emissions and document the location of asbestos containing materials.

TABLE 2-1. LA ASBESTOS EXPOSURE SOURCES AND RELATED REGULATIONS LINCOLN COUNTY, MONTANA

Source	Applicable Regulation	Effect of Regulation on LA Asbestos Exposure	Considerations					
Soil	Libby and Troy Building Permits	LA asbestos is not addressed. Permit applicants receive information on ERS and the MT Asbestos Control Act, and are advised to contact ERS before digging.	Consider revising the requirements to require contacting ERS prior to digging or remodeling projects. Also consider extending the application of current or revised building requirements beyond the city limits.					
Dust	Control of Air Pollution Ordinance, Contingency Measures	LA asbestos is not addressed. The ordinance provides for control of specific sources and for a comprehensive review if the contributing source cannot be identified.	Consider incorporating air standards for LA asbestos that are based on the draft EPA inhalation toxicity values for the Site.					
	Control of Air Pollution Ordinance, Dust Control - Regulated Road Sanding and Sweeping District	LA asbestos is not addressed, but should reduce spread and exposure. Requires various measures to reduce dust generated from road sanding.	For areas outside the current regulated district, consider recommending the existing ordinances for dust control as best management practices, or imposing them as regulations.					
	Montana Asbestos Control Act	The Act provides measures for controlling asbestos exposure at many facilities. Controls use, transportation, and disposal of asbestos containing material.	Consider providing relevant information to owners of small rental units and single-family homes through local contractors, equipment rental providers, building material suppliers, and local government agencies.					
	OSHA Requirements	OSHA regulates asbestos exposure in the workplace.	Consider using OSHA standards as a starting point to develop LA exposure standards for the public.					
	Libby and Troy Building Permits	LA asbestos is not addressed. Permit applicants receive information on ERS and the MT Asbestos Control Act, and are advised to contact ERS before digging.	Consider revising the requirements to require contacting ERS prior to digging or remodeling projects. Also consider extending the application of current or revised building requirements beyond the city limits.					
Fire- Related	Control of Air Pollution Ordinance, Solid Fuel Burning Devices	LA asbestos is not addressed. Emission limits do not include any specific limits on asbestos fibers. Requires a permit to install or operate any type of solid fuel burning device. The types of fuel that may be burned are restricted, and most material that could contain asbestos fibers is prohibited.	Consider additional ordinances regarding burning local wood and managing the associated ashes may be warranted, but will depend on the findings of the pending EPA study regarding exposure and risk associated with cutting and burning trees that contain LA asbestos.					
	Control of Air Pollution Ordinance, Outdoor Burning	Could interpret LA asbestos as foreign material but may not be sufficient to effectively limit LA exposure. Requires permits for all open burning. Limits material that can be burned to those unlikely to be significant sources of LA asbestos.	Depending on the findings of the pending EPA study regarding exposure and risk associated with cutting and burning trees and byproducts that contain LA asbestos, additional regulations regarding outdoor burning may be warranted.					

Note:

^{*} Considerations apply to both the Lincoln County Subdivision Regulations and City of Libby Subdivision Regulations.

TABLE 2-2. STATUS SUMMARY AND AVAILABLE RESULTS FOR ACTIVITY-BASED SAMPLING SCENARIOS LIBBY ASBESTOS SITE, LINCOLN COUNTY, MONTANA

Operable Unit	Scenario	Status ¹	Results (s/cc)
	Investigation: David Thompson Search & Rescue center - active indoor work	Completed 2009	BDL to 7E-2
	Investigation: David Thompson Search & Rescue center - passive indoor work	Completed 2009	3E-4 to 8.8E-3
OU-1	Investigation: Brush hogging vegetation/grass cutting	Completed 2009	3.8E-3 to 7.2E-2
	Post-Remedy Rescue work at David Thompson Rescue center	Pending	Not available
	Post Remedy Brush Hogging - vegetation/grass cutting	Pending	Not available
	Resident in OU2	None completed - remedy severs pathways	Not available
OU-2	Post-Remedy Mowing within MT Hwy 37 ROW	Pending	Not available
	Post-Remedy Walking along Riverbank	Pending	Not available
	Recreational ATV riding	Completed 2010	Not available
	Recreational Walking/Hiking	Completed 2010	Not available
	Recreational Camping or clearing an area of duff for campsite	Completed 2010	Not available
	Recreational Wood gathering/Firewood harvesting	Completed 2010	Not available
	Recreational Smoke inhalation from campfire	Completed 2010	Not available
	Occupational Driving though area	Completed 2010	Not available
OU-3	Occupational USFS trail maintenance operations	Completed 2010	Not available
	Occupational USFS ground fire fighting activities - McCloud, hoe, pulaski	Pending	Not available
	Occupational USFS ground fire fighting activities - track layer, mechanical	Pending	Not available
	Occupational USFS air-based fire fighting activities - pilot	Completed 2010	Not available
	Occupational Commercial Logging - mechanical mostly	Pending	Not available
	Recreational hunting - Combination of previous hiking ABS and animal tissue samples	Pending	Not available
	Recreational fishing - Along Rainy Creek near Kootenai Rive (near OU2, OU3, and OU4)	Pending	Not available
	Residential Indoor Passive Activities - summer	Completed July-Aug 2007	BDL to 9.9E-3
	Residential Indoor Active Activities - summer	Completed July-Aug 2007	BDL to 9.0E-3
	Residential Indoor Passive Activities - fall	Completed Sept 2007 - Jan 2008	BDL to 4.0E-4
	Residential Indoor Active Activities - fall	Completed Sept 2007 - Jan 2008	BDL to 9.7E-3
	Residential Indoor Passive Activities - winter :	Completed Jan - April 2008	BDL to 7.5E-4
	Residential Indoor Active Activities - winter	Completed Jan - April 2008	BDL to 1.8E-3
	Residential Indoor Passive Activities - spring	Completed April - June 2008	BDL to 3.8E-4
	Residential Indoor Active Activities - spring	Completed April - June 2008	BDL to 4.6E-3
	Residential Indoor Passive Activities - summary	Completed 2007 - 2008	BDL to 9.9E-3
	Residential Indoor Active Activities - summary	Completed 2007 - 2008	BDL to 9.7E-3
	Residential Gardening - digging with hand tools - summer	Completed 2007	BDL to 14.4
OU-4	Residential Gardening - raking with hand tools - summer	Completed 2007	BDL to 3.1E-1
00.4	Residential Gardening - mechanical mowing - summer	Completed 2007	BDL to 5.7E-1
	Residential Gardening - digging with hand tools - spring	Completed 2008	BDL to 2.1E-1
	Residential Gardening - raking with hand tools - spring	Completed 2008	BDL to 4.4E-1
	Residential Gardening - mechanical mowing - spring	Completed 2008	BDL to 2.8E-1
	Residential Gardening - Landscaping with Bark	Pending	Not available
	Residential Drive a Car	Pending	Not available
	Residential Adult Bicycling - Paved Roads	Pending	Not available
	Residential Adult Bicycling - Unpaved Roads	Pending .	Not available
	Residential Child Bicycling - Paved Roads	Pending	Not available
	Residential Child Bicycling - Unpaved Driveway	Pending	Not available
	Residential Child on Bike in Unpaved Driveway	Pending	Not available
	Residential Child Digging in Unpaved Driveway	Pending	Not available

TABLE 2-2. STATUS SUMMARY AND AVAILABLE RESULTS FOR ACTIVITY-BASED SAMPLING SCENARIOS LIBBY ASBESTOS SITE, LINCOLN COUNTY, MONTANA

Operable Unit	Scenario	Status ¹	Results (s/cc)
	Students Playing on fields (soccer, football, baseball, frisbee)	Completed 2009	BDL to 2.5E-3
	Students Playing on equipment (i.e. swing set - generic play)	Completed 2009	BDL to 3.9E,2
	Students Walking/Running over ground material (i.e. paved playground, field, sand)	Completed 2009	BDL
	Occupational - School Maintenance activities (outside sweeping, digging, and raking)	Completed 2009	BDL to 2.8E-3
	Occupational - School Maintenance mowing school lawns	Completed 2009	BDL to 2.2E-3
	Residential Indoor Activities - Reanalyze for Trace-Person ABS	Pending	Not available
	Wood Stove Cleaning - low level asbestos in wood to burn	Pending	Not available
J-4 (cont.)	Wood Stove Cleaning - mid-level asbestos in wood to burn	Pending	Not available
J-4 (COIIC.)	Wood Stove Cleaning - high-level asbestos in wood to burn	Pending	Not available
	Occupational Air Monitoring for Fire Department Work - Structure and Wildland Locations	Pending	Not available
	Occupational Air Monitoring for Teacher (within Libby Schools)	Pending	Not available
	Occupational Air Monitoring for Indoor Office Work (USEPA Info Center)	Pending	Not available
	Occupational Air Monitoring for in Indoor USFS Work	Pending	Not available
	Occupational Air Monitoring for Construction Work	Pending	Not available
	Residential Trade-Person ABS (for light construction work - analysis from previous indoor ABS)	Pending	Not available
	Occupational Logging ABS Scenario(s) in Flower Creek Drainage	Pending	Not available
	Recreational Adult Bicycling paved path	Completed 2007 - 2008	9.80E-05
	Recreational Child Bicycling paved path	Completed 2007 - 2008	1.30E-04
	Recreational Walking/Hiking near Libby Creek	Completed 2007 - 2008	BDL
OU-5	Recreational Motocross Riding Course and Spectator	Completed 2007 - 2008	BDL
	Occupational Indoor work in older buildings	Completed 2007 - 2008	9.8E-5 to 1.6E-2
	Occupational Outdoor work near/loading wood chips - mechanical	Completed 2007 - 2008	BDL to 6.3E-3
	Occupational Outdoor work near/loading wood chips - manual	Completed 2011	BDL
OU-6	Occupational BNSF Activities (to be determined)	Pending	Not available
	Residential Indoor Passive Activities	Pending	Not available
	Residential Indoor Active Activities	Pending	Not available
	Residential Gardening - hand tools	Pending .	Not available
	Residential Yard Work - mechanical (mowing, etc.)	Pending	Not available
	Residential Child on Bike and Playing in Unpaved Driveway	Pending	Not available
	Residential Adult biking with child in carrier on payed and unpayed surfaces	Pending	Not available
	Residential driving a car - paved and unpaved surfaces	- Man	
	Recreational activities at parks and school yards	Pending	Not available
	Recreational Riding ATVs in right of way/road	Completed 2010 - 2011	BDL to 1.8E-2
	Occupational MDT Rototilling	Completed 2010 - 2011	BDL 10 1.02-2
	Occupational MDT brush hogging and grass cutting	Completed 2010 - 2011	BDL

Abbreviations:

OU = Operable Unit for the Libby Asbestos Site

BDL = Below Detection Limit

BNSF - Burlington Northern Santa Fe

MDT = Montana Department of Transportation

s/cc = structures per cubic centimeter (LA asbestos)

USEPA = United States Environmental Protection Agency

USFS = United States Forest Service

Note

¹ Status of activity-based results as of August 3, 2012 from USEPA/MDEQ reports and USEPA/MDEQ July 2012 project updates

	TABLE 3-1. RISK-COMPONENT MATRIX ASBESTOS RESOURCE PROGRAM LINCOLN COUNTY, MONTANA Potential Asbestos Resource Program Component	Inform ¹	Mitigate ²	Prevent ³	Indoor Ambient Air (Office and Building)	Indoor Office Work (Routine Activities)	Fire Fighting (Residential)	Fire Fighting (Wildfire)	Outdoor Construction/Demolition and Mainten:	Road and Right-of-Way Maintenance	Work-Related Travel on Forest/Public Land	Contractor for Residential Construction/Demol	Commercial Construction/Demolition & Mainte	BNSF Railroad Corridor Activities and Mainter	Commercial Logging	Farming/Ranching	Driving on Unpaved Surfaces	Driving on Paved Surfaces	Children/Teachers/Staff at Public Schools	Interim EPA Remedy Implementation	Indoor Ambient Air (Residential)	Indoor Air (Routine Passive and Active Activiti	Outdoor Ambient Air (Neighborhoods and Tow	Gardening, Landscaping, and Lawn Maintena	Non-Motorized Recreation in Town	Non-motorized Recreation on Forest/Public La	Child Playing in Town	Driving on Unpaved Surfaces	Driving on paved surfaces	Construction/Demolition and Maintenance	Motorized ATV/Off-Road use on Forest/Public	Cutting and Gathering Firewood	Maintenance of Wood Heating Systems	Nearby Asbestos Remediation or Activities	Recreation near OU3/Kootenai River/LA-Outc	Community Risk Perception and Asbestos
	E1: Landscape/Garden Extension Program Education	х	х						1														s T	1												1
	E2: Air Monitoring Extension Program Education	X	X				1	1	1			1	1	1		1	1	1		1	1		1							1				1		1
	E3: ARP Booth and Community Brochure Education	X	x		1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	V	/	1	1	1	1	1	1	1	1	1	1
	E4: Newcomer Education	X							1			1	1	1-31	1	1			1	1		1		/	1	1	1			✓	1	1	1	✓	1	1
5	E5: External Education	X				9.6			144.7						1	1				1														1		1
atic	E6: K-12 Student Education	x	x																1						1	1	1									1
Educ	E7: Early Childhood Education	X	X						7 1/4										1					1	V		1								7 - 1	1
m	E8: Outdoor Recreational Awareness Education	X	X							1	1				1		1								1	1	1	1			1	1			1	1
	E9: Public Information Database Education	X	X									1	1							1										1				1		1
12.9	E10: Occupational Awareness Education	X	X		1	1	1	1	1	1	1	1	1	1	1	1			1																	1
	E11: MDEQ Asbestos Program Education	X	X		1	1	1	7	1	1		1	1						1	1	1	✓								1					17,70	1
	R1: Ground Surface Improvement Resources	-	Х	Х					1				11/4				1								V	1		1			1				1	V
11 4	R2: Dust Prevention Resources	-	х	X						1	1	1				1	1			1			1	1	1	1	1	✓		V	✓			✓		1
****	R3: Landscape Resources	X	X					1100	1	17							1 200					1	✓	✓	175		T				e trans		ng dia	✓	10-1	✓
	R4: Early Childhood Education Resources	X	х	х	1				1					1 1					1					1			V			1						✓
es	R5: Community HEPA Vacuums/Replacement Filters Resource		х	Х	1	1	1.0								1,115				P	1	1	1	111				Girt)	-			Title 1		V	1	375	
2	R6: HEPA Filter Systems Resources		х	X	1	1					11,23									V	1	1												1		
eso	R7: Contractor Training Resources	Х	х			1	1	1	1	V	1	1	1	1	1	1	1 5 11		1	1																7 1 1
ď	R8: Accredited Contractors Rebate Resources	х	X	175								1	✓																	√ _{nd}						
	R9: Prescription Information Assistance Resources	Х				111	11111					1 1				1 1											11.5				Y 14	-			100	1
	R10: Economic Development Liaison Resources	X		******					1	10	- 111	1	1		1	1	100			1											.,	22				1
	R11: Future Program Development	Х	x	Х	1	1	1	1	1	1	1	1	1	1	✓	1	✓	✓	1	1	1	✓	1	1	1	1	1	1	✓	1	1	1	1	1	1	1
Bareley.	I1: Update Codes/Ordinances/Regulations Initiative ⁴	х					1					1	1	1	1		1	1		1								1	1	1		1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1				
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Ē	I5: Ban Vermiculite Sales Initiative	x	X						1			1	1							1				1							**************************************			1		1
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Occupational Scenarios

Potential Exposure

Residential Scenarios

Notes

- 1. Inform: Information is disseminated on the potential exposure and procedures to avoid exposure
- 2. Mitigate: Having the potential to lessen the severity of exposure
- 3. Prevent: Reducing exposure through cutting off exposure pathway (reclamation/remediation)
- 4. As outlined in the Land Use Restrictions Report (Trihydro, June 2012)

Reduction

Strategy

TABLE 4-1. ANNUAL BUDGET ITEM ESTIMATES LIBBY ASBESTOS SITE, LINCOLN COUNTY, MONTANA

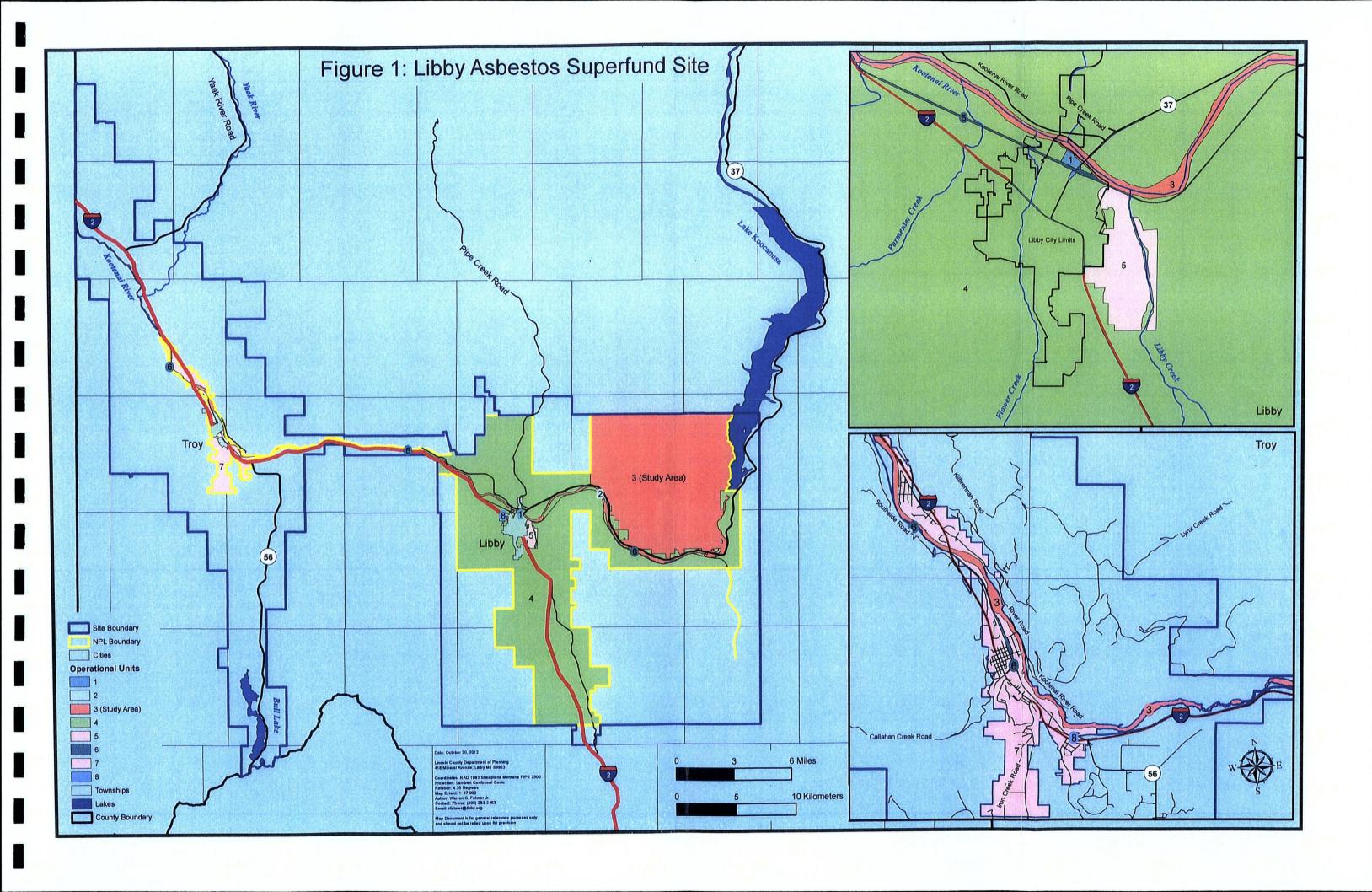
Item	Item Description	Unit of Measure
Grass/flower seed mix	50 pound bags (R:2)	bags/year
Garden/landscape supplements	40 pound bags (R:3)	bags/year
Replacement daycare groundcover	2 cubic foot bags to 10 cubic yard truck loads (R:4)	cubic yards/year
HEPA filtration vacuums	(R:5)	vacuums/year
HEPA vacuum filters	replacement filters for HEPA vacuum (R:5)	filters/year
Paving/hardscape materials	asphalt and hardscape (R:1, R:2)	square yards/year
Educational booth	(E:3)	1 booth
Outreach giveaways	includes trinkets, raffle prizes, and promotional products for local outreach events (E:3), national/regional conferences (E:5), newcomer packages, early childhood and K-12 outreach (E:4, E:6, and E:7).	annual estimate
Vehicles	2 full size pickup trucks for Initiatives Coordinator and assistant; 1 pickup and 1 SUV/car for program use (all components)	4
Trailers	one to haul seed mix (R:2), supplements (R:3), replacement groundcover (R:4), and other resources; one to haul/store air sampling equipment (E:2)	2
Fuel for 4 vehicles	fuel for 4 ARP vehicles	gallons/year
Storage unit with power	to store seed, vacuums, sampling equipment, etc.	monthly
Low flow, long duration sampling instruments	(E:2)	3 monitoring units
High Flow, Short duration sampling instruments	(E:2)	3 monitoring units
Soil/air sample & analysis	for sample preparation, collection, and analysis (E:2, R:2)	# samples/year
Office space	one per staff	# staff/year
Office furniture	one per staff	# staff/year
Utilities	for number of offices	monthly
Miscellaneous office supplies	Disposable supplies	annual estimate
Advertising	for all applicable components	billboard, post cards, brochures, info packets
Printing	for all applicable components	as needed
Mailings & bulk mail permit	for all applicable components	3 mailings/year
Computer software	purchase and maintenance for word processing, graphic design, data management and GIS; prepare and implement GIS/software programming, database management and syncing of systems	annual estimate
Health & Safety Program	for implementation, equipment, facility/personnel monitoring, decontamination	annual estimate
Staff training	for HAZWOPER, refresher courses, AHERA Inspector, GIS, data management, inspections, sampling, school outreach, etc.	# trainings/staff/year
Medical surveillance	as required annually by HAZWOPER	# staff/year
Travel	to outreach events, conferences, workshops, meetings, etc.	annual estimate
Conferences	registration fees, booth fees, expenses, etc.	annual estimate
Professional fees	memberships, journals, certifications	annual estimate
Legal fees	for registrations, licensing, certifications, etc.	annual estimate
Contract staff - Medical	annually for R:9	# hours/year
Contract staff - Legal	for initiatives components	# hours/year
Contract staff - Instructional	annually for E:1, R:7	# hours/year
Rebates/Subsidies	annually for R:6, R:7, R:8	annual estimate

Notes:

- 1. Annual budget items estimates only include those items identified in the ARP Development Report, and are not inclusive of all cost that may be required for the program.
- 2. The costs of an FTE (i.e., salary, benefits, overhead) are left to the discretion of the Board of Health, and not included in the estimate.
- 3. The number of items to be budgeted will depend on components selected for implementation.

FIGURES





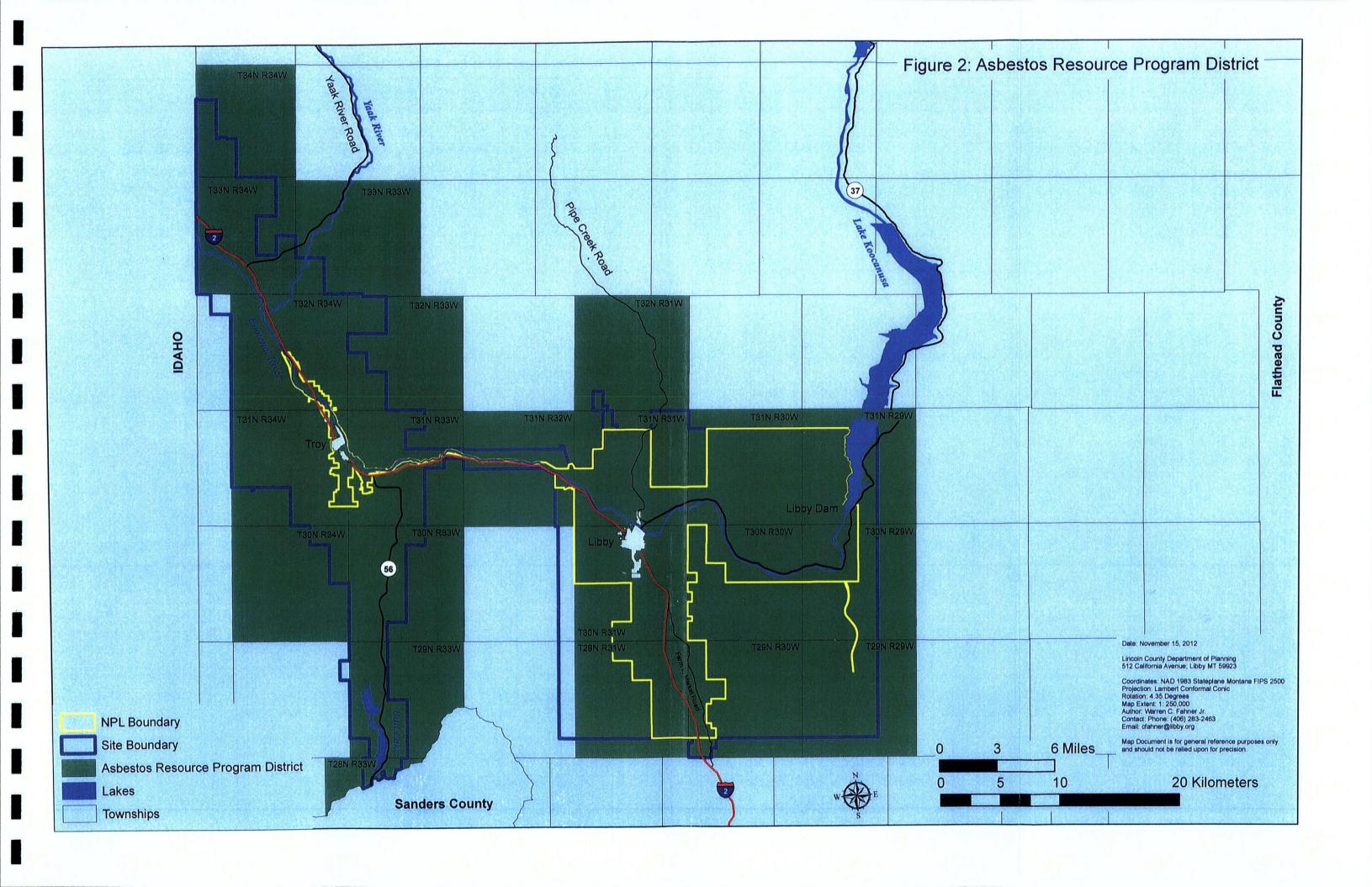
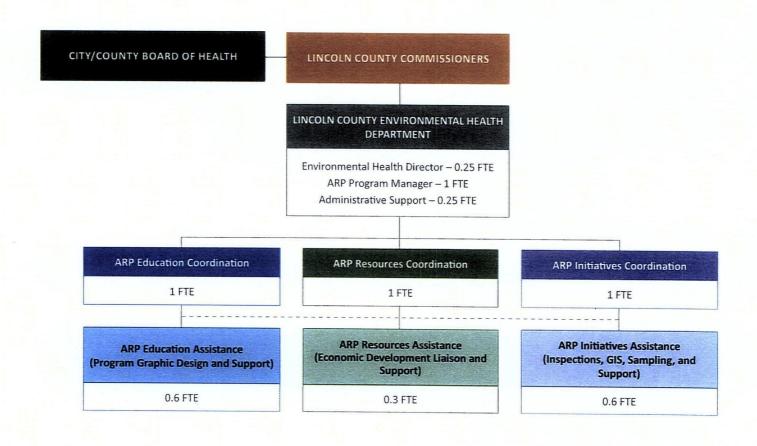


FIGURE 3: LINCOLN COUNTY ENVIRONMENTAL HEALTH DEPARTMENT ASBESTOS RESOURCE PROGRAM PROPOSED INTERIM ORGANIZATIONAL CHART



LEGEND

ARP - Asbestos Resource Program

FTE - Full Time Employee Equivalence Factor

Note: FTE estimates do not include time for component I:1



APPENDIX A

EDUCATION INFORMATION SHEETS, E:1 – E:11



LANDSCAPE/GARDENING EXTENSION PROGRAM EDUCATION (E:1)

Outreach classes will be provided to increase awareness and support for the public on garden/landscaping practices which will minimize exposure to LA asbestos and reduce potential for crosscontamination.

Purpose

The ARP Landscape/Gardening Extension Program education component is designed to:

- Address the public request for gardening and landscape guidance following exterior removal actions
- Increase public awareness on potential cross-contamination issues including the introduction of landscape materials from yards that may contain LA asbestos, and using potting/garden soils that may contain vermiculite
- Provide a short, concise class with repeated offerings at different venues to provide multiple opportunities for the public to attend
- Reach that portion of the public who will not participate in the 3part Master Gardener Course offered through the Montana State University (MSU) Extension Service at the Flathead Valley Community College

Implementation Strategy

The development and implementation of this educational component will be

completed by the MSU Extension Service with oversight from the ARP Education Coordinator and staff.

This component will include:

- A short class (20-30 minutes) and brochures will be developed and offered to provide information on availability and timelines to seed and grow grass, xeriscaping (local plants), planting deeper rooted trees/shrubs, fertilizer/soil amendment types, what to do if vermiculite is encountered in the process, and a reference guide with contact and resource information
- The curriculum and class materials will reflect current EPA guidance, and be developed with the support of landscape professionals and Master Gardener instructional staff
- The classes will be available to all citizens regardless of LA asbestos removal status or their location in the ARP District
- The classes will be available to local government entities, including maintenance crews, and parks and recreation personnel

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LANDSCAPE/GARDEN EXTENSION PROGRAM EDUCATION (E:1)

- The class will be presented to local garden/landscaping groups and at other applicable outreach events
- The program will provide soil sampling and analysis to provide property-specific guidance on establishing and maintaining healthy lawns and gardens
- Periodic surveys (web or personal contact-based) to assess the use and level of satisfaction with this component

Budget Considerations

- Staff Resources: 0.1 FTE
- Other Budget Items: program advertising; developing/printing classroom materials and brochures; materials for local events and outreach presentations; travel to events/classes; and soil sampling and analysis

Future Development

Considerations for future development may include:

 Coordinating with the ARP Landscape Resources Component (R:4) to provide information at resource events or during resource allocation

Effectiveness Criteria

As part of the annual review of the ARP, the effectiveness of this component will be determined using:

- Statistics on course attendance and satisfaction
- Data on interest at local outreach events including estimates of information disseminated, number of interactions, and verbal/written feedback

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AIR MONITORING EXTENSION PROGRAM EDUCATION (E:2)

Expansion of the USEPA and MDEQ asbestos ambient air monitoring program to include additional areas and air monitoring for both ambient air and land use change activities such as construction, demolition, new subdivisions, and natural disasters.

Purpose

The ARP Air Monitoring Extension Program component is designed to:

- Monitor major land use change activities and respond proactively to those events which increase the community's risk to asbestos exposure
- Complement and enhance the USEPA's and MDEQ's ambient air monitoring programs for Libby and Troy, respectively

Implementation Strategy

The development and implementation of this educational component will be completed by the ARP staff in cooperation with the USEPA/MDEQ.

This component will include:

- The ARP conducting air monitoring for asbestos primarily within the ARP District
- The ARP purchasing and utilizing both high-flow, short duration and low-flow, long duration air monitoring equipment
- The ARP monitoring major activities including construction, demolition, new subdivisions, and

- natural disasters (e.g., fires, landslides, rock slides, tornados, landslides, wind storms, and floods)
- The ARP will report sampling results to the public

Budget Considerations

- Staff Resources: 0.2 FTE
- Other Budget Items: air monitoring equipment; haul trailer; equipment storage; staff training for air monitoring equipment installation, operation and evaluation of data; laboratory analytical testing for air samples; and database development and maintenance

Future Development

Considerations for future development may include:

The ARP assuming responsibility
of the USEPA and MDEQ existing
ambient air asbestos monitoring
programs once final remedies are
established (i.e. the interim period
ends), including the ARP taking
ownership of sampling equipment,
overseeing the laboratory
contracts, and integrating the

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AIR MONITORING EXTENSION PROGRAM EDUCATION (E:2)

USEPA/MDEQ databases into the ARP database

 The ARP determining if the monitored event causes asbestos to become airborne at levels potentially harmful to human health, and provide best management practices for those activities which cause an increase in airborne asbestos

Effectiveness Criteria

As part of the annual review of the ARP, the effectiveness of this component will be determined using:

- Statistics on data results, type of event, weather, season, etc.
- Trend analysis of data over time, event type, weather conditions, etc.
- Evaluation of the actions taken by the ARP following monitoring events and a cost benefit analyses of the monitoring versus reduction of risk to asbestos exposure

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ARP BOOTH & COMMUNITY BROCHURE EDUCATION (E:3)

An informational booth and brochures for community events (Logger Days, Nordic Fest, Health Fair, County Fair/Rodeo, etc.) that highlights activities with potential for asbestos exposure and practices to reduce exposure. Information would be available for public mailings, at outreach events, and for the ARP Permit Program.

Purpose

The ARP Booth & Community Brochure component is designed to:

- Provide informational brochures to raise the public's awareness of those activities with the potential for exposure to asbestos and reinforce behaviors and practices which reduce exposure to asbestos
- Build a trustworthy and respectful relationship between the public and the ARP by providing opportunities for the public to interact with the ARP and utilize available services

Implementation Strategy

The development and implementation of this educational component will be completed by the ARP Education Coordinator and staff in cooperation with local organizations, businesses, educational institutions, and government entities.

This component will include:

 Information, promotional products, and games provided at events with school aged children focusing on changing childhood behaviors

- to minimize exposure to asbestos and reduce cumulative lifetime exposure
- Brochures and promotional products designed for the adult population to increase awareness and use of the ARP with a focus on minimizing exposure to asbestos, removal actions by USEPA/MDEQ, and post removal actions necessary to reduce the potential for future exposure
- Informational materials on dust generating activities and practices to prevent/minimize dust generation
- Informational materials on major land use change activities and recommended practices to minimize asbestos exposure
- Informational materials to assist with permitting requirements for renovations and new construction projects
- An annual newsletter or informational mailing provided to the public with updates on applicable initiatives, availability of newly developed components, compliance issues, and an opportunity for the public to submit feedback

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ARP BOOTH & COMMUNITY BROCHURE EDUCATION (E:3)

- The creation of an ARP logo and mascot to help the public associate the ARP with something fun and positive and increase the public's awareness of the ARP
- ARP staff utilizing the informational booth and outreach materials at regional events where other communities may be facing a similar environmental challenge

Budget Considerations

- Staff Resources: 0.3 FTE
- Other Budget Items: advertising for events; developing and printing brochures; purchase of booth; hosting and sponsoring of events; registration fees; travel to events; and program giveaways and games

Future Development

Considerations for future development may include:

 Periodic updates so that materials do not become stale and outdated

Effectiveness Criteria

As part of the annual review of the ARP, the effectiveness of this component will be determined using:

- Periodic outreach surveys and interviews to assess the public's awareness and risk-perception of LA asbestos and effectiveness of the ARP components
- Feedback from the public at local events and informational meetings to evaluate the effectiveness and satisfaction with the ARP and individual components

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Website: http://www.lincolncountymt.us/environmentalhealth/Asbestos.html

NEWCOMER EDUCATION (E:4)

A resource-based information package providing area specific (e.g., recreation, education, real estate, etc.) and LA asbestos-related (e.g., history, removal actions, BOH/ARP, etc.) information to businesses and residents interested in relocating to the **Libby and Troy** areas.

Purpose

The ARP Newcomer Outreach component is designed to:

- Provide an informational resource package for businesses and residents interested in moving to the Libby/Troy areas so that they can make informed decisions about relocating
- Provide a marketing tool to promote the benefits of relocating to the Libby/Troy area and help stimulate the local economy
- Reach a greater audience by incorporating the information package for newcomers into existing websites and providing with all real estate transactions

Implementation Strategy

The development and implementation of this educational component will be completed by the ARP Education Coordinator and staff in cooperation local Chambers of Commerce, businesses, real estate firms, the City of Libby, the City of Troy, and Lincoln County.

This component will include:

- An information package with materials on the history of mining in the area, how/why Libby became a Superfund Site, the current status of the removal actions, future USEPA and MDEQ involvement, and the role of the BOH and the ARP
- Information emphasizing the programs and precautions in place to ensure the public has the ability to minimize their potential exposure to LA asbestos
- Materials that promote the educational, recreational, and economic value of the area
- A section that highlights existing, successful businesses, as well as highly satisfied businesses and residents who have recently relocated to the area
- Incorporating the informational package into existing web sites which may include the City of Libby, City of Troy, Lincoln County, Libby Chamber of Commerce, Troy Chamber of Commerce, and a private website (libbyMT.com)
- The ARP coordinating with the local real estate firms and organizations to ensure that the information package is provided to

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NEWCOMER EDUCATION (E:4)

the buyer during real estate transactions

 Working with the Economic Development Liaison (R:11)

Budget Considerations

- Staff Resources: 0.2 FTE
- Other Budget Items: developing, printing and distributing the informational package; and formatting the information package for web-based applications

Future Development

Periodic updates so the information does not become stale and outdated.

Effectiveness Criteria

As part of the annual review of the ARP, the effectiveness of this component will be determined using:

- Statistics on the number of information packages distributed
- Statistics and trends analysis on the number of new businesses and residents relocating to the area
- Random follow-up phone calls to parties requesting an information package to access the usefulness of the package and its impact on deciding whether to relocate to the area
- Statistics on web site visits

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EXTERNAL EDUCATION (E:5)

Providing outreach beyond Lincoln County, including: conference and workshop attendance; presentations to regional community groups; coordination with state/federal asbestos programs; membership with national healthbased organizations; and dissemination of information through national websites.

Purpose

The ARP External Education component is designed to:

- Provide accurate, up-to-date information outside of Lincoln County on the risks associated with LA asbestos, the current programs in place to minimize exposure, and future expectations and plans
- Mentor other small communities with asbestos exposure issues and provide a model for those communities to develop their own program
- Provide an opportunity for ARP staff to attend environmental, health, and commerce-based conferences throughout Montana and nationally

Implementation Strategy

The development and implementation of this educational component will be completed by the ARP Program Manager in cooperation with the ARP Education Coordinator and Economic Development Liaison (R:11).

This component will include:

- Attending national and regional events, conducting presentations, serving on committees, and participating in workshops
- Coordinating with other state and federal asbestos programs to determine if those agencies can provide tools and resources to the ARP
- Joining health-based organizations that can enhance the knowledge and expertise of the ARP
- Providing regional outreach to communities on the progress and status of the Site (e.g., realtor boards, economic development groups, service clubs, etc.)
- Coordinating with other ARP staff to ensure that adequate outreach materials are available for events attended
- Sharing information, resources, and industry contacts with interested parties, and incorporating new information and ideas into the ARP

Budget Considerations

Staff Resources: 0.1 FTE

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EXTERNAL EDUCATION (E:5)

 Other Budget Items: printing of materials for events; registration fees and travel to events; membership fees; and program giveaways for events

Future Development

Considerations for future development may include:

 Periodic updates so the information does not become stale and outdated

Effectiveness Criteria

As part of the annual review of the ARP, the effectiveness of this component will be determined using:

- Post-event survey of attendees regarding the usefulness of the presentation, and the number of people in attendance
- Annual evaluation regarding the number of events attended, cost, and benefit to the program
- Feedback from participants at events

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K-12 STUDENT EDUCATION (E:6)

A K-12 outreach program to increase asbestos awareness and promote behaviors that reduce or eliminate exposure to asbestos.

Purpose

The ARP K-12 Student Education component is designed to:

- Increase asbestos awareness and promote behaviors to reduce or eliminate exposures
- Empower children to make healthy choices

Implementation Strategy

The development and implementation of this educational component will be completed by the ARP Education Coordinator in cooperation with the Libby Legacy Program, Libby and Troy education districts, and teachers.

This component will include:

- Curriculum to target 1st graders, 5th or 6th graders, and 9th or 10th graders
- Presentations of the educational materials in the classroom, at assemblies, and afterschool events.
- Inclusion of "Asbestos Awareness Week" in the school calendar
- Coordinating with the Libby Legacy program to provide

resources for teachers to utilize in the classroom

- Curriculum for the younger children that focusses on historical uses of vermiculite and asbestos, where it might be found in the community, and what to do if it is encountered; curriculum will include games, field trips, coloring books, stickers, and trinkets to promote good hygiene
- Curriculum for the older children that focusses on science-based projects, science fairs, seminars, and field trips, and include technical resources for students to utilize in school projects
- Opportunities for high school students to participate in an ARP internship program, and assist with ARP educational events

Budget Considerations

- Staff Resources: 0.1 FTE
- Other Budget Items: developing, printing, and distributing curriculum and games, trinkets and other age-specific promotional products

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K-12 STUDENT EDUCATION (E:6)

Future Development

Considerations for future development may include:

 Periodic updates so the information does not become stale and outdated

Effectiveness Criteria

As part of the annual review of the ARP, the effectiveness of this component will be determined using:

- Statistics on the number of students reached, teachers participating in the curriculum, and extracurricular events attended
- Surveys of students and teachers to determine usefulness of the curriculum, behavior changes, and perception of health risks

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EARLY CHILDHOOD EDUCATION (E:7)

An education program for early childhood care providers and education facilities regarding asbestos issues for young children, with a focus on outside play-area safety awareness.

Purpose

The ARP Early Childhood Education component is designed to:

- Increase asbestos awareness at child care facilities and promote behaviors to reduce or eliminate exposures by children
- Provide incentives for early childhood caregivers who participate in the training and resources offered through the ARP

Implementation Strategy

The development and implementation of this educational component will be completed by the ARP Education Coordinator and staff in cooperation with the Montana Department of Public Health and Human Services (DPHHS).

This component will include:

- Informational materials on the potential risk of asbestos to young children, with a focus on exposure from play areas (e.g., sand boxes, playgrounds, etc.)
- Recommendations and resources (per R-5) regarding replacement of playground materials (e.g., soil, woodchips, sand) to reduce or

eliminate potential exposures to asbestos

- Outreach to daycare facilities, childhood education centers, babysitters, nannies, pediatricians, and programs under the Montana DPHHS
- Coordination with the Montana DPHHS to include informational materials into their child care programs (i.e., licensed child care centers, registered group and family home care, and certified providers)

Budget Considerations

- Staff Resources: 0.1 FTE
- Other Budget Items: developing, printing and distributing program materials; and travel

Future Development

Considerations for future development may include:

- Periodic updates so the information does not become stale and outdated
- Coordination with education and health organizations to

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EARLY CHILDHOOD EDUCATION (E:7)

incorporate the childcare training into Continuing Education Units (CEUs) for childcare professionals

Effectiveness Criteria

As part of the annual review of the ARP, the effectiveness of this component would be determined using:

- Statistics on the number of childcare providers contacted and their feedback
- Statistics on the number of resources (R:5) utilized

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OUTDOOR RECREATION AWARENESS EDUCATION (E:8)

An educational program to increase awareness of asbestos exposure during outdoor recreational activities, and promote practices that can reduce or eliminate exposure.

Purpose

The ARP Outdoor Recreational Education component is designed to:

- Inform the public regarding recreational activities that have the potential for exposure to asbestos, and promote practices that can reduce or eliminate exposure
- Increase the guiding industry's awareness of potential exposure to asbestos so they can take adequate precautions to protect themselves and their clients

Implementation Strategy

The development and implementation of this educational component will be completed by the ARP Education Coordinator and staff in coordination with the local outdoor recreational groups and organizations and the guiding industry.

This component will include:

 Informational brochures on outdoor recreational activities (e.g., fishing, hunting, guiding, offroad vehicle use, hiking, biking) that have the potential for increasing exposure to asbestos,

- and guidance on how to reduce or eliminate exposure
- Maps which identify roads located in areas of concern (e.g., vermiculite outcrops, OUs, heavy use areas)
- Presentations to local guides, retailers, and associations that promote outdoor recreational activities

Budget Considerations

- Staff Resources: 0.1 FTE
- Other Budget Items: developing, printing and distributing program materials; and travel to outreach events and to meet with the guides

Future Development

No future development of this component has been identified at this time.

Effectiveness Criteria

As part of the annual review of the ARP, the effectiveness of this component would be determined using:

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OUTDOOR RECREATIONAL AWARENESS EDUCATION (E:8)

- Statistics on the number of informational materials distributed and presentations provided
- Periodic outreach surveys to guides/clubs (web or personal contact-based) on usefulness of the information

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Website: http://www.lincolncountymt.us/environmentalhealth/Asbestos.html

PUBLIC INFORMATION DATABASE EDUCATION (E:9)

A program to facilitate dissemination of information to property owners and prospective purchasers regarding asbestos inspection and removal activities.

Purpose

The ARP Public Information Database Education component is designed to:

- Assist the public with obtaining timely information on property status with respect to ARP, USEPA, and MDEQ inspections and removal actions
- Inform potential buyers of known asbestos issues at a property prior to purchase

Implementation Strategy

The development and implementation of this educational component will be completed by the ARP Education Coordinator and staff in coordination with the USEPA and MDEQ.

This component will include:

- Coordinating with the USEPA and MDEQ to facilitate property status requests from the public
- Developing a database to enter data gathered by the ARP from activities such as ARP permits, contractor operating certification, and ARP air monitoring events; providing the public with pertinent data per requests

 Coordinating with the local Board of Realtors to develop a voluntary process for disclosure on asbestos-related issues for all real estate transactions

Budget Considerations

- Staff Resources: 0.2 FTE
- Other Budget Items: purchasing, developing, operating, and maintaining a database; and tracking disclosure statements

Future Development

Considerations for future development may include:

The ARP taking over the operation and management of the existing USEPA and MDEQ database(s)

Effectiveness Criteria

As part of the annual review of the ARP, the effectiveness of this component would be determined using:

 Statistics on the number of property status requests made

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PUBLIC INFORMATION DATABASE EDUCATION (E:9)

(including web based, written, and in-person)

- Statistics on the number of property disclosure statements submitted versus the number of properties sold
- Periodic surveys of the public to evaluate the effectiveness and satisfaction of the property status database program
- Periodic surveys of realtors to evaluate the effectiveness of the asbestos disclosure requirement

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OCCUPATIONAL AWARENESS EDUCATION (E:10)

Information and best management practices regarding asbestos exposure issues for occupations such as construction, landscaping, public utilities, parks and recreation, and road and railroad crews.

Purpose

The ARP Occupational Awareness Education component is designed to:

 Inform workers and employers of occupational hazards related to asbestos, and provide best management practices to reduce or eliminate exposure

Implementation Strategy

The development and implementation of this educational component will be completed by the ARP Education Coordinator and staff in coordination with industry and government representatives.

This component will include:

- Informational brochures on occupational hazards related to asbestos, and best management practices to reduce or eliminate exposure during work activities
- Informational brochures on the potential for workers to expose the public to asbestos during dust generating and other activities and best management practices to reduce or eliminate asbestos exposure

Presentations and training on occupational issues regarding asbestos for local businesses, trade organizations, and governments

Budget Considerations

- Staff Resources: 0.1 FTE
- Other Budget Items: developing, printing and distributing program materials; and travel to outreach events

Future Development

Periodic updates so the information does not become stale and outdated.

Effectiveness Criteria

As part of the annual review of the ARP, the effectiveness of this component would be determined using:

- Statistics on the number of informational materials distributed and outreach events attended
- Periodic outreach surveys (web or personal contact-based) to all applicable businesses and

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OCCUPATIONAL AWARENESS EDUCATION (E:10)

government agencies on usefulness of the information

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MDEQ ASBESTOS PROGRAM EDUCATION (E:11)

An educational program to increase awareness of the Montana Department of Environmental Quality's (MDEQ) Asbestos Control Program.

Purpose

The ARP MDEQ Asbestos Program Education component is designed to:

 Inform the public regarding MDEQ regulations pertaining to asbestos and asbestos containing materials (ACM)

Implementation Strategy

The development and implementation of this educational component will be completed by the ARP Education Coordinator and staff in coordination with the MDEQ, the City of Libby, the City of Troy, and local landfills.

This component will include:

- Information to describe the similarities and differences between the MDEQ regulations and the ARP regulations for asbestos and ACM.
- Inclusion of MDEQ Asbestos Program requirements on ARP permit applications
- Information to the public and local landfills regarding proper sampling and disposal requirements for asbestos and ACM

Budget Considerations

- Staff Resources: 0.1 FTE
- Other Budget Items: developing, printing and distributing program materials; and staff time for updating local initiatives

Future Development

Considerations for future development may include:

 Consolidation of MDEQ and ARP certification programs

Effectiveness Criteria

As part of the annual review of the ARP, the effectiveness of this component would be determined using:

- Random reviews of Building Permit applications to evaluate compliance
- Periodic outreach surveys to businesses (web or personal contact-based) to evaluate the effectiveness of the component

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APPENDIX B

RESOURCES INFORMATION SHEETS, R:1 – R:11



GROUND SURFACE IMPROVEMENT RESOURCES (R:1)

A program to pave or add hardscape materials to areas where there is the potential for the public to be exposed to soil or dust that may contain asbestos.

Purpose

The ARP Recreation Area Ground Surface Improvement Resources component is designed to:

Reduce the public's exposure to asbestos in soils and dust at areas within the ARP District by covering/capping exposed areas

Implementation Strategy

The development and implementation of this resource component will be completed by the ARP Resource Coordinator and staff in cooperation with applicable government agencies and local recreational organizations.

This component will include:

- A BOH-appointed Paving Advisory Committee to compile and rank a list of sites or areas for paving/hardscaping based on cost versus reduction of potential risk to asbestos exposure
- Representation on the Paving Advisory Committee may be comprised of citizens, local recreational organizations (biking, hiking, fishing, hunting, ATV), local governments, the United States Forest Service (USFS), the

Bureau of Land Management (BLM), and the Montana Department of Transportation (MDT)

- Providing resources for paving/hardscaping recreational areas
- Provide incentives (e.g., cost sharing, rebates, etc.) to private property owners to pave/hardscape high traffic areas such as parking lots, alleys, etc.
- Coordination with the applicable governing agency to complete paving/hardscaping projects

Budget Considerations

- Staff Resources: 0.1 FTE
- Other Budget Items: paving/hardscape costs, sign-in boxes, travel to sites

Future Development

No future development of this component has been identified at this time

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GROUND SURFACE IMPROVEMENT RESOURCES (R:1)

Effectiveness Criteria

As part of the annual review of the ARP, the effectiveness of this component will be evaluated using:

- Statistic on the number and size of areas paved/hardscaped
- Statistics on the number of users at areas paved/hardscaped (data compiled using sign-in boxes or traffic estimates)

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DUST PREVENTION RESOURCES (R:2)

Resources to reduce asbestos dust, cross-contamination, and exposure issues.

Purpose

The ARP Dust Prevention Resources component is designed to:

- Reduce dust generation in the ARP District during land disturbing activities such as excavation, driving on dirt surfaces, and landscaping
- Prevent airborne transport of LA asbestos fibers throughout the ARP District
- Address the public's concern over activities that generate dust from nearby streets, highways, and public and private properties

Implementation Strategy

The development and implementation of this resource component will be completed by the ARP Resource Coordinator, in cooperation with ARP Education and Initiative staff.

This component will include:

 An annual allocation of native grass and/or flower seed mixes available for lands with limited vegetative cover or bare soil and no plan for annual crops

- An annual allocation of seed mixes for local government use on abandoned or non-maintained properties that may contain asbestos and have been determined to be a dust nuisance.
- Coordination with the USEPA and MDEQ to determine property status and appropriateness of seeding
- Coordination with local governments to identify and prioritize areas with high exposure potential (e.g., dirt alleys, parking lots/areas, and roads) and provide funds for paving/hardscaping
- Identification of approved sand and gravel sources
- Coordination with local governments and the sweeping/sanding district to promote the use of salt and other alternative materials for winter road maintenance
- Providing reference materials on the types, uses, costs, and availability of masks for protection during dust-generating activities

Budget Considerations

Staff Resources: 0.2 FTE

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Office: 406-283-2462 E-mail: ARP@libby.org

DUST PREVENTION RESOURCES (R:2)

 Other Budget Items: annual allocation of grass and/or wildflower seed; advertising; and development/printing of guidance and reference materials.

Future Development

Considerations for future development may include:

- Providing HEPA dust masks to property owners for quick investigations or inspections at properties where the risk of exposure to asbestos is perceived as minimal
- The ARP assuming responsibility for the USEPA and MDEQ programs to identify and approve asbestos-free source locations for sand and gravel/fill, and coordinate with maintenance crews to ensure that asbestosfree sand/gravel and fill are used in road and maintenance projects
- Testing of sand and gravel sources for asbestos and maintaining a map and database of approved and unapproved locations. This could also include testing and approval of asbestosfree topsoil locations

Effectiveness Criteria

As part of the annual review of the ARP, the effectiveness of this component will be evaluated using:

- Statistics of resource use and inquiries
- Amount of areas seeded
- Amount of areas paved/hardscaped

- Number of approved sand & gravel sources available for local road departments
- Amounts of alternative road maintenance materials used
- Periodic surveys (web or personal contact-based) to assess the use and desire to continue this component

LANDSCAPE RESOURCES (R:3)

Landscape resources to promote the establishment and growth of healthy yards and gardens.

Purpose

The ARP Landscape Resources component is designed to:

- Reduce or eliminate the use of landscape materials that may contain vermiculite/asbestos
- Promote the establishment and growth of healthy yards and gardens in the ARP District

Implementation Strategy

The development and implementation of this resource component will be completed by the ARP Resource Coordinator and staff in cooperation with the USEPA Environmental Resource Specialist (ERS).

This component will include:

- Providing landscape resources
 (e.g., fill, topsoil, soil
 amendments, seed, plants, and
 raised bed building materials) to
 property owners following ERS
 removal actions and at properties
 with previous removal actions
 having difficulty establishing lawns
 and gardens
- Providing landscape resources regardless of when and if removal actions have occurred, to promote

healthy yards and gardens and landscaping practices which minimize asbestos exposure (e.g., raised beds, xeriscaping, etc.)

- Coordination between the ARP and ERS so that landscape resources are available immediately following removal actions
- Soil testing to evaluate soil conditions and provide effective resources for successful growth and establishment of lawns and gardens

Budget Considerations

- Staff Resources: 0.2 FTE
- Other Budget Items: fill, topsoil, amendments, seed, plants and landscape supplies; pickup and trailer for transportation and delivery of materials; and consultations with professional landscaper(s)

Future Development

No future development of this component has been identified at this time.

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LANDSCAPE RESOURCES (R:3)

Effectiveness Criteria

As part of the annual review of the ARP, the effectiveness of this component will be evaluated using:

- Statistics on the number of properties receiving landscape resources
- Statistics on the number, type, and amount of resources provided
- Periodic surveys (web or personal contact-based) to the public receiving the resources to evaluate the effectiveness of and satisfaction with the resources and services received

Office: 406-283-2462 E-mail: ARP@libby.org

EARLY CHILDHOOD EDUCATION RESOURCES (R:4)

Resources for early childhood care facilities to reduce or eliminate asbestos on play area surfaces.

Purpose

The ARP Early Childhood Education Resources component is designed to:

 Reduce or eliminate asbestos exposure by small children at early childhood care facilities in the ARP District

Implementation Strategy

The development and implementation of this resource component will be completed by the ARP Resource Coordinator and staff in cooperation with the Montana Department of Public Health and Human Services (MDHHS).

This component will include:

- Resources for early childhood care facilities to remove existing ground cover materials and replace them with at least 6 inches of material that does not contain asbestos
- Coordination with the MDHHS to ensure information on the resources is disseminated to licensed facilities

Budget Considerations

- Staff Resources: 0.1 FTE
- Other Budget Items: asbestos free groundcover/sand; and delivery and installation of materials

Future Development

Considerations for future development may include:

- Establishment of a new Lincoln County ordinance by the BOH prohibiting the use of woodchips at MDHHS licensed child care facilities
- Expanding the resource to include unlicensed facilities

Effectiveness Criteria

As part of the annual review of the ARP, the effectiveness of this component will be evaluated using:

- Statistics on number or child care facilities receiving resources, and the amount of area covered
- Statistics on the type, amount, and cost of resources provided

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COMMUNITY HEPA VACUUMS/REPLACEMENT FILTERS RESOURCE (R:5)

HEPA (High
Efficiency
Particulate Air)
filtration vacuums
and replacement
filters will be
provided to the
public within the
ARP District for
capturing and
removing asbestos
from the interior of
structures.

Purpose

The ARP Community HEPA
Vacuums/Replacement Filters
Resources component is designed to:

- Provide a selected portion of the public with HEPA vacuums and replacement filters
- Reduce or eliminate asbestos exposures from the interior of structures on properties within the ARP District where removal actions have not been performed, trace levels of asbestos are present, and previously provided vacuums are no longer functional

Implementation Strategy

The development and implementation of this resource component will be completed by the ARP Resource Coordinator and staff in cooperation with HEPA vacuum manufacturers and retail representatives, and the USEPA

This component will include:

 Prioritized distribution of HEPA vacuums and replacement filters within the ARP District in accordance with a specified allocation plan

- Brochures and public information sessions for the public regarding the operation and maintenance of the HEPA vacuums
- Coordination with the USEPA's "HEPA Vacuum Cleaner Program"

Budget Considerations

- Staff Resources: 0.1 FTE
- Other Budget Items: HEPA vacuums and filters; distribution costs, storage, preparation of a brochure on how to dispose of used HEPA filters.

Future Development

Considerations for future development may include:

 The ARP assuming responsibility for the USEPA's "HEPA Vacuum Cleaner Program"

Effectiveness Criteria

As part of the annual review of the ARP, the effectiveness of this component will be evaluated using:

 Statistics on the number or vacuums distributed and the

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COMMUNITY HEPA VACUUMS/REPLACEMENT FILTERS RESOURCES (R:5)

number of replacement filters provided per vacuum

Periodic surveys (web or personal contact-based) to evaluate the use of and satisfaction with the vacuums/filters and program logistics

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HEPA FILTER SYSTEMS RESOURCES (R:6)

A subsidy or rebate program for HEPA filtration systems in buildings occupied by sensitive populations.

Purpose

The ARP HEPA Filter Systems
Resources component is designed to:

Promote the installation of HEPA filtration systems in buildings where sensitive populations reside and/or work

Implementation Strategy

The development and implementation of this resource component will be completed by the ARP Resource Coordinator and staff.

This component will include:

- Subsidies and/or rebates for the installation and maintenance of HEPA filtration systems in homes and businesses occupied by sensitive populations
- Coordination with the USEPA, local health officials, and the CARD Clinic to identify and prioritize sensitive populations (e.g., elderly, immune compromised, schools, daycare facilities, etc.) that would benefit from the HEPA filtration systems
- Information on permanent and portable HEPA filtration systems

Coordination with the Economic Development Liaison (R:10) to provide resource information to parties interested in moving to the ARP District

Budget Considerations

- Staff Resources: 0.1 FTE
- Other Budget Items: funds for subsidy/rebate; advertising, printing and distribution of outreach materials

Future Development

No future development of this component has been identified at this time.

Effectiveness Criteria

As part of the annual review of the ARP, the effectiveness of this component will be evaluated using:

- Statistics on the number of subsidy or rebates requested/rewarded
- Periodic surveys (web or personal contact-based) to evaluate the use of and satisfaction with the program

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Office: 406-283-2462 E-mail: ARP@libby.org

CONTRACTOR TRAINING RESOURCES (R:7)

Free training courses for contractors working in the ARP District, including OSHA HAZWOPER and MDEQ Asbestos Control Program accreditation.

Purpose

The ARP Contractor Training Resources component is designed to:

 Increase the knowledge and pool of contractors who perform asbestos-related work in the ARP District

Implementation Strategy

The development and implementation of this resource component will be completed by the ARP Resource Coordinator and staff in coordination with qualified training organizations.

This component will include:

- Free training courses (e.g., OSHA HAZWOPER and MDEQ Asbestos Control Program) for contractors who can demonstrate they have performed asbestosrelated work in the ARP District within the last 2 years, or are pursuing asbestos-related work in the ARP District during the coming year
- Coordination with the MDEQ Asbestos Control Program to provide asbestos accreditation training

 Rebates for MDEQ Asbestos Control Program accreditation

Budget Considerations

- Staff Resources: 0.1 FTE.
- Other Budget Items: development advertising, and hosting of training courses; and instructors/ organizations to teach training courses

Future Development

Periodic updates so the material does not become stale or outdated.

Effectiveness Criteria

As part of the annual review of the ARP, the effectiveness of this component will be evaluated using:

- Statistics on the number of training courses offered and the participation rate
- Periodic surveys (web or personal contact-based) of ARP permit applicants on the availability of and satisfaction with appropriately trained contractors to perform asbestos-related work

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ACCREDITED CONTRACTORS REBATE RESOURCES (R:8)

Rebates for homeowners and business owners in that hire accredited asbestos contractors to inspect and abate Asbestos Containing Materials (ACM) regulated under the MDEQ Asbestos Control Program.

Purpose

The ARP Accredited Contractors Rebate Resources component is designed to:

- Encourage homeowners and business owners to use an accredited asbestos inspector prior to demolition or renovation projects
- Promote the proper handling and disposal of potential ACM

Implementation Strategy

The development and implementation of this resource component will be completed by the ARP Resource Coordinator and staff in cooperation with the Montana Department of Environmental Quality (MDEQ) Asbestos Control Program.

This component will include:

- A rebate to homeowners and business owners who use MDEQ accredited contractors
- Coordination with the MDEQ to include training on the identification of vermiculite as part of the MDEQ Asbestos Accreditation Program

Budget Considerations

- Staff Resources: 0.1 FTE
- Other Budget Items: development, advertising and distribution of outreach materials for the program; and fund for rebates

Future Development

No future development of this component has been identified at this time.

Effectiveness Criteria

As part of the annual review of the ARP, the effectiveness of this component will be evaluated using:

Statistics on the number of rebates requested/rewarded

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PRESCRIPTION INFORMATION ASSISTANCE RESOURCES (R:9)

Assistance to help the public understand their insurance options regarding medication that is prescribed for asbestos-related diseases.

Purpose

The ARP Prescription Information Assistance Resources component is designed to:

 Provide the public with information and guidance on issues related to medical prescriptions for asbestos-related diseases

Implementation Strategy

The development and implementation of this resource component will be completed by the ARP Resource Coordinator and staff in coordination with the Center for Asbestos Related Disease (CARD) clinic.

This component will include:

- Information and guidance on options for prescriptions associated with asbestos related diseases (e.g., Medicare/Medicaid programs, private insurance programs, and prescription options)
- Coordination with the CARD clinic to provide medical advice

 Other Budget Items: developing, printing, and distributing informational materials; and additional professional staff such as a pharmacist, payment specialist, etc.

Future Development

Considerations for future development may include:

 Expansion of the program to other local medical facilities (e.g., doctor offices, hospitals, clinics)

Effectiveness Criteria

As part of the annual review of the ARP, the effectiveness of this component will be evaluated using:

 Periodic surveys (web or personal contact-based) of CARD patients being prescribed medicine for asbestos-related diseases on the usefulness of and satisfaction with the program

Budget Considerations

Staff Resources: 0.1 FTE

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ECONOMIC DEVELOPMENT LIAISON RESOURCES (R:10)

An ARP Economic
Development
Liaison to help
developers, new
businesses, and
large-scale
economic
development
projects understand
vermiculite and
asbestos-related
concerns and
permitting
requirements.

Purpose

The ARP Economic Development Liaison Resources component is designed to:

- Support new economic development projects in the ARP District with regards to asbestosrelated issues
- Increase economic activity and stimulate the local economy in the ARP District

Implementation Strategy

The development and implementation of this resource component will be completed by the ARP Resource Coordinator and staff in coordination with local businesses, developers, and economic-based organizations.

This component will include:

- Informational materials to help developers and businesses understand and address asbestos concerns
- Assistance for developers and businesses with the ARP permit process

- Coordination with the USEPA and MDEQ to address federal and state requirements
- Promotion of economic development at local business, trade fairs, workshops, and regional conferences

Budget Considerations

- Staff Resources: 0.2 FTE
- Other Budget Items: developing, printing and distributing informational materials; and travel to outreach events

Future Development

No future development of this component has been identified at this time.

Effectiveness Criteria

As part of the annual review of the ARP, the effectiveness of this component will be evaluated using:

- Statistics on the number of new economic development projects proposed/started/completed
- Trend analyses on assessed property values, taxes collected

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ECONOMIC DEVELOPMENT LIAISON RESOURCES (R:10)

from businesses and tourism, annual income, etc.

 Feedback from attendees at outreach events

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FUTURE PROGRAM DEVELOPMENT (R:11)

Expansion of the ARP program components once the USEPA and the MDEQ complete the site-specific risk assessment and establish final remedies for the Operable Units (OUs).

Purpose

The ARP Future Program
Development component is designed to:

- Identify the programs currently administered by the USEPA and the MDEQ, which may be incorporated into the ARP at some point in the future
- Provide a realistic estimate of resources and allocations required for future expansion of the ARP

Implementation Strategy

The development and implementation of this resource component will be completed by the ARP staff in coordination with the United States Environmental Protection Agency (USEPA) and the Montana Department of Environmental Quality (MDEQ).

This component may include:

 Evaluation of the resources required and the appropriateness of transferring the ERS, UDIG, property status database, asbestos-free clean fill approval, and ambient air monitoring for asbestos programs from the

- USEPA and the MDEQ to the ARP
- Coordination with the USEPA and the MDEQ to determine which programs will move to the ARP, and develop a process for the transition
- Negotiations with the USEPA and the MDEQ to secure adequate resources to implement additional ARP programs
- Development of an initiative to require vehicles to be covered when transporting loose materials and debris within the ARP District. This requirement is dependent on the findings of the pending USEPA risk assessment with respect to asbestos exposure from hauling activities
- Development of an initiative to require an asbestos disclosure statement for property transactions if the voluntary process developed by the local Board of Realtors is ineffective
- Extension of open burn restrictions to areas outside of Libby town limits if future data indicates that open burning is impacting public health

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FUTURE PROGRAM DEVELOPMENT (R:11)

 Development of a landlord-tenant disclosure requirement for asbestos if future data indicates that there is a public health concern

Budget Considerations

Budget considerations will be evaluated prior to the ARP implementing new program components

Effectiveness Criteria

The effectiveness of the ARP is discussed in detail in the ARP Development Report and on the component information sheets. The program effectiveness evaluation will be used to determine which components will be phased out, modified, and added to the program.

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APPENDIX C

INITIATIVES INFORMATION SHEETS, I:1 – I:6



UPDATE CODES/ORDINANCES/REGULATIONS INITIATIVE (I:1)

Update existing city and county codes, ordinances, and regulations to include relevant aspects of the Asbestos Resource Program.

Purpose

The Update
Codes/Ordinances/Regulations
Initiative is designed to:

- Apply within the boundaries of the ARP District (see Initiative I:2), or in some cases, Lincoln County
- Update existing city and county codes, ordinances, and regulations (e.g., septic, building, subdivision, etc.) to include ARP information (e.g., permitting requirements, general information, contact information, etc.)

Implementation Strategy

The development and implementation of this initiatives component will be completed by the ARP Initiative Coordinator and staff in cooperation with local government entities. Codes, ordinances, and regulations will be updated and presented to the County Commissioners or City Councils for consideration, comment, and adoption.

This component will include:

 Recommendations that generally follow suggestions provided in Table 1 of the LUR Report (Trihydro 2012a) Revisions to existing city and county codes, ordinances, and regulations (recommended language attached)

Budget Considerations

The ARP Initiative Coordinator will coordinate staff and budgetary resources with the appropriate city and county departments to reduce potential impacts on existing city and county budgets and resources. Staff resources 100 hours.

Effectiveness Criteria

As part of the annual review of the ARP, the effectiveness of this component will be evaluated using:

- A list of codes and ordinances updated
- A list of codes and ordinances to be updated
- Public comments received on revised codes and ordinances

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UPDATE CODES/ORDINANCES INITIATIVE (I:1)

The following recommendations are provided regarding specific revisions to the wording of existing Lincoln County ordinances and regulations, as well associated revisions to related forms and guidance documents. Comparable revisions are recommended for complimentary ordinances/regulations, forms, and guidance documents used by the City of Libby and the City of Troy. Recommended deletions are identified by strikeouts, and recommended additions are identified by underlines. Italicized "Notes" are provided to identify related actions that may be necessary to implement the recommendations.

RECOMMENDATION NO. 1

HEALTH AND ENVIRONMENT REGULATIONS

CHAPTER 1: Control of Air Pollution

Subchapter 4: OUTDOOR BURNING REGULATIONS

(Revised 08 October 2008)

- 75.1.103 DEFINITIONS: As used in this chapter, unless indicated otherwise, the following definitions apply:
 - (1) "Air Contaminant" means dust, ash, fumes, gas, mist, smoke, vapor or any particulate matter or a combination thereof present in the outdoor atmosphere.
 - (2) "Air Pollution Control District" means the geographical area designated on the attached map and as defined by the following Universal Transverse Mercator (UTM) coordinates:
 - Begin, 600000mE, 5370000mN; east to 620000mE, 5370000mN; south to 620000mE, 5340000mN; west to 600000mE, 5340000mN; north to 600000mE, 5370000mN.
 - (3) "Asbestos" means asbestos in any of the asbestiform varieties of chrysotile, amosite, crocidolite, anthophyllite, tremolite, actinolite, and Libby amphibole.
 - (4) "Asbestos-containing material (ACM)" means any materials or product which contains more than 1 percent asbestos, vermiculite insulation, and vermiculite-containing building materials.

l	(3)(5) "Department" means the Lincoln County Environmental Health Department. (4) "DEQ" means the Montana Department of Environmental Quality.
	(4)(6) "DEQ" means the Montana Department of Environmental Quality.
	(5)(7) "Emission" means a release into the outdoor atmosphere of an air contaminant.
į	(6)(8) "EPA" means the US Environmental Protection Agency.
	(7)(9) "MAAQS" means Montana Ambient Air Quality Standards. (8) "NAAQS" means National Ambient Air Quality Standards.
	(8)(10) "NAAQS" means National Ambient Air Quality Standards.
	(9)(11) "Person" means an individual, a partnership, a firm, an association, a municipality, a public or private corporation, the state or a subdivision or agency of the state, a trust, an estate, an interstate body, the federal government or an agency of the federal government, or any other legal entity and includes persons resident in Canada
	(10)(12) "PM10" means particulate matter with an aerodynamic diameter of less than or equal to a nominal 10 micrometers.
	(11)(13) "PM2.5" means particulate matter with an aerodynamic diameter of less than or equal to a nominal 2.5 micrometers.
7	75.1.402 SCOPE AND EFFECTIVE DATE:
	(1) This regulation applies to all persons, agencies, institutions, businesses, industries or government entities living in or located within the boundaries of the Air Pollution Control District and Impact Zone L and all licensed landfills within the boundaries of Lincoln County. Regulations prohibiting open burning of ACM apply within the boundaries of the Asbestos Resource Program District, as defined by the City/County Board of Health for Lincoln County.
<u>7:</u>	OUTDOOR BURNING CONTROL AREAS:
	(3) Prohibitions regarding open burning of ACM shall apply throughout the boundaries of the Asbestos Resource Program District, as defined by the City/County Board of Health for Lincoln County.
	END OF RECOMMENDATION NO. 1

RECOMMENDATION NO. 2

Lincoln County Wastewater Treatment and Disposal Regulation

Regulation No. 3

Revised Date: June 1, 1993

SECTION 4: PERMIT AND LICENSE

A. PERMIT

A valid permit issued by the County Sanitarian is required before a wastewater treatment and disposal system can be installed, constructed, altered, or extended.

1. <u>Permit Application.</u> An application for a permit shall be made to the Department.

The application shall be made by the owner of the property, or his authorized agent, on a form provided by the Department; signed and dated by the applicant and, shall include the following information:

e. A copy of the Asbestos Resource Program Permit, as required by the City/County Board of Health for Lincoln County.

END OF RECOMMENDATION NO. 2

RECOMMENDATION NO. 3

HEALTH AND ENVIRONMENT REGULATIONS

CHAPTER 2: General Health Regulations

Subchapter 5: Storage, Handling, and Disposal of Solid Waste Regulations

Undated

- 75.2.502 <u>DEFINITIONS</u>: The following definitions shall apply in the interpretation and enforcement of this subchapter. The word "shall" as used in this subchapter indicates a mandatory requirement.
 - (1) "Asbestos" means asbestos in any of the asbestiform varieties of chrysotile, amosite, crocidolite, anthophyllite, tremolite, actinolite, and Libby amphibole.
 - (2) "Asbestos-containing material (ACM)" means any materials or product which contains more than 1 percent asbestos, vermiculite insulation, and vermiculite-containing building materials.
 - (1)(3) Board of Health City/Lincoln-County Board of Health for Lincoln County.
 - (2)(4) Health Officer Lincoln County Health Officer or his authorized representatives, including any peace officer so authorized.
 - (3)(5) Garbage Putrescible animal and vegetable wastes resulting from the handling, preparation, cooking and consumption of food.
 - (4)(6) Composting The decomposition of organic waste to a relatively stable humus-like material. A microbiological decomposition producing heat and liberating primarily only carbon dioxide and water.
 - (5)(7) Incineration The process of burning combustible refuse to ash at high temperatures in receptacles especially designed for this purpose and approved by the State Board of Health.
 - (6)(8) Person An individual, group of individuals, partnership, firm, corporation, association, company, county, city, village or improvement district.
 - (7)(9) Public Nuisance Anything which is injurious to health, indecent or offensive to the senses, or an obstruction to the free use of property, so as to interfere with the comfortable

enjoyment of life or property, or which unlawfully obstructs the free passage or use in the customary manner, of any navigable waters, or any public park, square, street or highway. Further, a public nuisance is one which affects, at the same time, an entire community or neighborhood or any considerable number of persons, although the extent of the annoyance or damage inflicted upon individuals may be unequal.

- (8)(10) Refuse All putrescible and non-putrescible solid waste, except body waste, including garbage, rubbish, street cleaning, dead animals, yard clippings, <u>asbestos</u>, and solid market and solid industrial wastes.
- (9)(11) Rubbish Non-putrescible solid waste consisting of both combustible and non-combustible wastes, such as paper, cardboard, abandoned vehicles, tin cans, wood, glass, crockery and similar materials.
- (10)(12) Sanitary Landfill A method of disposing of refuse on land without creating nuisances or hazards to public health or safety by utilizing the principles of compaction and burying. The refuse is confined to the smallest practical area and volume, and covered with a layer of earth or wood waste at the conclusion of each day's operation or at such more frequent intervals as may be necessary.
- 75.2.506 <u>BURNING AND BURYING OF GARBAGE, REFUSE OR RUBBISH</u>: No person shall burn or bury garbage, refuse or rubbish within any yard or open space within the county. However, burying may be permitted in areas wherein the Health Officer's opinion the practice will not be offensive or cause a health problem to surrounding residents.

END OF RECOMMENDATION NO. 3

RECOMMENDATION NO. 4

HEALTH AND ENVIRONMENT REGULATIONS

CHAPTER 2: General Health Regulations

Subchapter 6: Open Burning Regulation

Undated

75.2.602 DEFINITIONS: The following definitions apply to this subchapter.

- (1) "Asbestos" means asbestos in any of the asbestiform varieties of chrysotile, amosite, crocidolite, anthophyllite, tremolite, actinolite, and Libby amphibole.
- (2) "Asbestos-containing material (ACM)" means any materials or product which contains more than 1 percent asbestos, vermiculite insulation, and vermiculite-containing building materials.
- (1)(3) For the purpose of open burning "Best Available Control Technology" (BACT means those techniques and methods of controlling emission of pollutants from an existing or proposed open burning source which limit those emissions to the maximum degree. Such techniques and methods may include the following: Scheduling of burning during periods and seasons of good ventilation, applying dispersion forecast, limiting the amount of burning to be performed during any period of time, using burning techniques which minimize smoke production, selecting fuel preparation methods that will minimize dirt and moisture content and promoting alternative treatments and uses of materials to be burned. In the case of essential agricultural open burning during September and October, BACT includes burning only during the time periods specified by the local health department.
- "Bonfire" means a ceremonial fire, in which the materials burned are cordwood or clean untreated dimensional wood and which is conducted by an educational, fraternal or religious organization for the purpose of celebrating a particular organization related event.
- (3)(5) "Essential agricultural open burning" means any open burning conducted on a farm or homesite for the purpose of:
 - a. Eliminating excess vegetative matter when no reasonable alternative method of disposal is available.
 - b. Improving range conditions when no reasonable alternative method of disposal is available.

c. Controlling forest pests and diseases.
(4)(6) "Major open burning source" means any person, agency, institution, business or industry conducting any open burning which on a statewide basis will emit more than 500 ton per calendar year of carbon monoxide or 50 tons per calendar year of any other regulated pollutant, except hydrocarbons.
(5)(7) "Minor open burning source" means any person, agency, institution, business or industry conducting any open burning which is not a major open burning source.
(6)(8) "Open burning" means combustion of any material directly in the open air. Open burning does not include the use of a source operating with a permit issued pursuant to this program, the use of a residential solid fuel burning device, the use of a barbecue using only enough fuel to cook food or the use of construction site heating devices using refined or gaseo fuels.
(7)(9) "Salvage operation" means any operation conducted in whole or in part for the salvaging or reclaiming of any product or material.
(8)(10) "Trade wastes" means solid, liquid or gaseous material resulting from construction or the operation of any business, trade, industry or demolition project. Wood product industry waste such as sawdust, bark, peelings, chips, shavings and cull wood are considered trade wastes.
75.2.603 <u>MATERIALS PROHIBITED:</u>
(2) The following material may not be disposed of by open burning:
(u) ACM.
END OF RECOMMENDATION NO. 4
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RECOMMENDATION NO. 5

Note: Based on the recommendations provided below, revisions to the "Citizen's Guide to Land Subdivision in Lincoln County" (updated October 16, 2009) are also recommended for the purpose of identifying the relevant components of the Asbestos Resource Program.

Lincoln County Subdivision Regulations

Amended: January 20, 2010

III. PRELIMINARY PLAT PROCESS

III-A. Pre-Application

- 3. At the pre-application meeting:
 - a. the Administrator shall identify, for informational purposes, the state laws, local regulations and growth policy provisions that may apply to the subdivision review process including, but not limited to, zoning regulations, floodplain regulations, Wildland Urban Interface Guidelines, access standards, Living with Wildlife guidelines, and Best Management Practices construction guidelines, and information on the Asbestos Resource Program provided by the City/County Board of Health for Lincoln County;

III-A-4. Review Process

Although no recommendations are provided for revising the regulation, it is recommended that the Asbestos Resource Program be included as an agency to be contacted as part of the Sufficiency Review.

IV. PRELIMINARY PLAT SUBMITTAL REQUIREMENTS

Along with the requisite fees, the following information shall be submitted for preliminary plat review (NOTE: If a manufactured housing community, RV Park or condominium development is proposed, provide a plan with all applicable information required on a preliminary plat.):

D. Primary Review Criteria Questionnaire (Environmental and Community Assessment) pursuant to MCA 76-3-603 & 608(3) and a report describing the probable impacts resulting from the proposed subdivision and proposed mitigation for each criteria listed below [First minor]

subdivisions must provide a Summary of Probable Impacts, which can be incorporated into the Project Summary, for each of the criteria]:

7. <u>Public Health and Safety</u>: Demonstrate that the proposed subdivision will not have adverse impact on conditions that relate to the public health and safety including emergency services; environmental health; flooding, rock falls or landslides, unstable soils, steep slopes, wildfire and other natural hazards, high voltage lines or high pressure gas lines; on-site or nearby off-site land uses that create a nuisance (e.g. noise, dust, smoke, unpleasant odors, <u>vermiculite</u>, <u>asbestos</u>), and air or vehicular traffic safety hazards.

Note: Although no recommendations are provided for revising the regulation, the following recommendation is provided for revising the Preliminary Review Criteria Questionnaire:

4.	IMPACTS	ON PU	BLIC	HEAL	TH A	ND S	AFETY

- g. Is the property within the Asbestos Resource Program District? Yes
 No
 1. If yes, an Asbestos Resource Program Permit must be
- K. Additional Material (as applicable):

obtained.

10. If the subdivision is in the Asbestos Resource Program District, provide a copy of the permit issued by the Asbestos Resource Program.

SUPPLEMENTAL ADMINISTRATIVE MATERIALS

B. Pre-Application Form

Note: Although no recommendations are provided for revising the regulation, the following recommendation is provided for revising the Subdivision Pre-Application Form:

- A. GENERAL SUBDIVISION QUESTIONS:
 - 8. Have you contacted the Asbestos Resource Program to determine if a Permit is required?

D. Preliminary Plan Submittal Checklist

> Note: Although no recommendations are provided for revising the regulation, the following recommendation is provided for revising the Preliminary Plat Checklist:

Additional Material (as applicable) 10.

Permit issued by the Asbestos Resource Program.

END OF RECOMMENDATION NO. 5

ASBESTOS RESOURCE PROGRAM PERMIT INITIATIVE (1:2)

A no-cost informational permit to address asbestos exposure associated with excavation, demolition, and remodeling activities; and construction of subdivisions, roads, septic systems, and drilling.

Purpose

The ARP Permit Initiative is designed to:

- Apply within the boundaries of the ARP District
- Apply, on a case-by-case basis, to portions of Lincoln County outside the ARP District (if requested by the property owner)
- Increase the public's awareness of activities that may expose people to asbestos
- Disseminate information regarding how to reduce the potential for exposure to asbestos, and what can be done if vermiculite or asbestos is encountered
- Provide a simple, one-stop, nocost permit application process that focuses on helping the public instead of imposing complicated permitting and enforcement requirements

Implementation Strategy

The development and implementation of this initiatives component will be completed by the ARP Initiative Coordinator, in consultation with other City/County staff who routinely work with existing ordinances, regulations,

and codes. The ARP Initiative Coordinator and support staff will be responsible for the majority of the development and implementation activities to reduce potential impacts on existing City and County staff and resources.

This component will include:

- A resolution by the BOH to establish the ARP and promulgation of BOH regulations for the ARP (recommended language attached)
- Establishment of the ARP District to define the areas where a permit is required (see Figure 2)
- On a case-by-case basis, and if requested by the property owner, access to ARP staff and resources for areas outside of the APR District but within Lincoln County
- A permit application requirement for: excavations of 1 cubic yard or larger; interior/exterior demolition or renovation projects that disturb 1 square yard or more of wall, floor or ceiling space; new subdivisions; septic system construction and modification; drilling; and, road construction and maintenance

Asbestos Resource Program
City / County Board of Health

Office: 406-283-2462 E-mail: ARP@libby.org

ASBESTOS RESOURCE PROGRAM PERMIT INITIATIVE (1:2)

- Issuance of a permit that will include: comprehensive information on vermiculite/ asbestos identification; best management practices to limit exposure: and what to do if vermiculite or asbestos is encountered
- Permitting assistance to the public for renovations and new construction projects
- Assistance contacting the Environmental Resource Specialist (ERS) for removal actions when vermiculite or asbestos is encountered during renovations
- Informative inspections, when requested by the property owner
- Random informative inspections to ensure the effectiveness of the program
- Notification of the ARP at the completion of work so the ARP can collect pertinent data for program tracking purposes

Proposed Enforcement

Violations regarding the requirement to obtain an ARP permit will be referred to the County Attorney's Office for enforcement.

Budget Considerations

- Staff Resources: 1.0 FTE
- Other Budget Items: advertising for permit requirements; development/printing permit applications and information; PPE for inspection staff; and GIS software, software maintenance agreement, and training.

Future Development

Considerations for future development may include:

- Transferring responsibility for the Environmental Resource Specialist (ERS) program from the USEPA to the ARP; and
- Transferring UDIG program responsibilities from the USEPA to the ARP.

Effectiveness Criteria

As part of the annual review of the ARP, the effectiveness of this component will be determined using:

- Statistics of permit applications permit completion reports, inspections, and compliance;
- Random inspections of applicable activities being conducted throughout the ARP district to determine compliance rates;
- Tracking of projects called into UDIG, categorizing those projects, and comparing to the number and type of projects where permits were granted; and
- Periodic surveys (web or personal contact-based) to assess the use and satisfaction of the component.

Asbestos Resource Program City / County Board of Health Office: 406-283-2462 E-mail: ARP@libby.org

ASBESTOS RESOURCE PROGRAM PERMIT INITIATIVE (I:2)

The following recommendations are provided regarding a new resolution and regulations to be promulgated by the City/County Board of Health for Lincoln County.

RECOMMENDATION NO. 1

RESOLUTION NO. 2013-001

WHEREAS, the City/County Board of Health for Lincoln County (Board of Health) was created as the Local Board of Health for Lincoln County by an Inter-local Agreement between the City of Libby and Lincoln County with authority under Mont Code Ann. § 50-2-166(2)(c)(v)(A) to enact public health regulations to protect public health, safety, and welfare and to facilitate Institutional Controls selected by the United States Environmental Protection Agency (USEPA) for the Libby Asbestos Superfund Site;

WHEREAS, the Board of Health finds there is a threat to public health, safety, and welfare posed by the environmental conditions that lead the USEPA to designate the Libby Asbestos Superfund site;

WHEREAS, the Board of Health has received a grant expiring on December 31, 2016 from the USEPA to allow for the development, adoption, implementation, and enforcement of the Asbestos Resource Program regulations to be used as interim Institutional Controls for the Libby Asbestos Superfund Site, with the goal of reducing the risk of the public's exposure to asbestos; and

WHEREAS, the amount of the grant funding authorized by the USEPA has not been determined for the time period April 1, 2013 through December 31, 2016.

BE IT THEREFORE RESOLVED:

- (1) The Board of Health adopts and creates the Asbestos Resource Program (ARP) as provided in the Proposed Asbestos Resource Program Report (Final Report), dated January 8, 2013, attached hereto including the ARP Regulations detailed in the Final Report;
- (2) The ARP and its Regulations shall expire on April 1, 2013 unless the amount of grant funding authorized by the USEPA for the period April 1, 2013 through December 31, 2016 is determined to be adequate by a later Resolution of this Board of Health; and
- (3) Unless otherwise extended by this Board of Health, this Resolution shall expire and the ARP and the Regulations adopted hereunder shall terminate on January 1, 2017.

DONE IN SESSION this 9th day of January, 2013.

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RECOMMENDATION NO. 2

ASBESTOS RESOURCE PROGRAM (ARP) REGULATIONS

I. GENERAL PROVISIONS

- A. <u>Title</u>: These regulations shall be known as the "ASBESTOS RESOURCE PROGRAM (ARP) REGULATIONS".
- B. <u>Authority</u>: Authorization for these regulations is through Mont. Code Ann. § 50-2-116 and by resolution of the City/County Board of Health for Lincoln County.
- C. <u>Purpose</u>: The purpose of this regulation is to reduce the possibility of the Public's exposure to asbestos as a result of excavation, demolition, remodeling, transportation, and other activities.
- D. Jurisdiction: These regulations govern activities within the ARP District, which includes: Township 28 North, Range 33 West for those sections within Lincoln County; Township 29 North, Range 33 West, for those sections within Lincoln County; Township 29 North, Range 31 West, all sections; Township 29 North, Range 30 West, all sections; Township 29 North, Range 29 West, all sections; Township 30 North, Range 34 West, all sections; Township 30 North, Range 31 West, all sections; Township 30 North, Range 39 West, all sections; Township 30 North, Range 29 West, all sections; Township 31 North, Range 34 West, all sections; Township 31 North, Range 33 West, all sections; Township 31 North, Range 32 West, all sections; Township 31 North, Range 31 West, all sections; Township 31 North, Range 39 West, all sections; Township 31 North, Range 39 West, all sections; Township 31 North, Range 39 West, all sections; Township 30 North, Range 31 West, all sections; Township 31 North, Range 33 West, all sections; Township 32 North, Range 31 West, all sections; Township 33 North, Range 33 West, all sections; Township 33 North, Range 33 West, all sections; Township 33 North, Range 34 West, all sections.
- E. <u>Definitions</u>: The following definitions shall apply in the interpretation and enforcement of this regulation. The word "shall" as used in this regulation indicates a mandatory requirement.
 - 1. "Asbestos" means asbestos in any of the asbestiform varieties of chrysotile, amosite, crocidolite, anthophyllite, tremolite, actinolite, and Libby amphibole.
 - 2. "Asbestos-containing material (ACM)" means any materials or product which contains more than one (1) percent asbestos, vermiculite insulation, and vermiculite-containing building materials.

- 3. "Asbestos Resource Program (ARP) Certified Contractor" is a contractor holding a current ARP contractor certification issued by the ARP, to excavate, demolish, or remodel property within the ARP District.
- 4. "Days" means business days (i.e., Monday, Tuesday, Wednesday, Thursday, and Friday), excluding holidays observed by Lincoln County.
- 5. "Person" is any individual, institution, partnership, corporation, association, or other private or government entity.
- 6. "Property" is land, landscaping, and structures.

II. PERMIT:

- A. <u>Permit Required</u>: A valid permit issued by the ARP is required before excavation, demolition, or remodeling of a property within the ARP District, unless:
 - 1. The excavation activities will displace less than one (1) cubic yard of material;
 - 2. The demolition or remodeling activities will encompass less than one (1) square yard of wall, floor, or ceiling;
 - 3. The demolition and remodeling activities will not disturb existing interior flooring (excluding carpet), interior walls, exterior siding, or insulation; or
 - 4. The demolition or remodeling of a structure that was constructed after January 1, 2000, and less than one (1) cubic yard of soil will be disturbed during those activities.
 - Excavation or demolition activities are conducted in response to an emergency, and the ARP is notified the next business day to determine if a permit application and permit is required.
- B. <u>Permit Application Requirements</u>: An application for a permit shall be made to the ARP by the owner of the property, or the owner's authorized agent; on a form provided by the ARP; signed and dated by the applicant; and include the following information:
 - 1. The name, address, and telephone number of the person who owns the real property;
 - 2. The physical address of the property;
 - 3. The name, address, and phone number of the person who will be performing the activity, if it is not owner of the real property;
 - 4. Confirmation that U-Dig has been notified; and

- 5. A description of the proposed activity, including:
 - a. The nature and extent of the project;
 - b. The presence or suspected presence of asbestos and/or vermiculite;
 - c. Measures to reduce or eliminate the disturbance of asbestos and/or vermiculite; and
 - d. Measures to reduce the generation of dust; and
 - e. Measures for transporting and disposing asbestos and/or vermiculite.
- C. Permit Fee: No permit fee is required.
- D. <u>Permit Process</u>: Permit applications shall be submitted and permits shall be issued as per the following schedules:
 - 1. Permit applications for residential projects shall be submitted at least two (2) days prior to the initiation of excavation, construction, demolition, or remodeling activities. The ARP shall: review the permit application; notify the Environmental Resource Specialist, if necessary; and issue a permit with information regarding the ARP within two (2) days of receiving a complete application. If the application is incomplete, the ARP may request additional information prior to issuing a permit.
 - 2. Permit applications for non-residential projects shall be submitted at least ten (10) days prior to the initiation of excavation, construction, demolition, or remodeling activities. The ARP shall: review the permit application; notify the Environmental Resource Specialist, if necessary; and issue a permit with information regarding the ARP within ten (10) days of receiving a complete application. If the application is incomplete, the ARP may request additional information prior to issuing a permit.
 - 3. Permit applications for non-residential projects may be submitted in less than ten (10) days, and the ARP may issue a permit in less than ten (10) days, if the applicant obtains prior approval from the ARP.
- E. <u>Penalties</u>: Any person who violates any provision of this regulation shall, upon conviction, be punished by a fine not less than Ten Dollars (\$10.00) dollars and not more than Two Hundred Dollars (\$200) for each offense. Each day of violation shall be considered a separate offense.
- F. <u>Effective Date</u>: The requirements of this regulation shall be effective one (1) year after the date of adoption by the City/County Board of Health for Lincoln County.

END OF RECOMMENDATION NO. 2

ARP CONTRACTOR CERTIFICATION INITIATIVE (I:3)

Asbestos-related training and certification will be required for contractors and other applicable entities who have the potential of encountering asbestos during work activities.

Purpose

The ARP Contractor Certification Initiative is designed to:

- Apply within the boundaries of the ARP District (see Initiative I:2)
- Train and certify contractors and other applicable entities to identify and manage vermiculite and asbestos encountered during work activities
- Be required for private and public entities
- Be available to a variety of contractors including: general, construction, electrical, plumbing, heavy equipment, septic system, and drilling

Implementation Strategy

The development and implementation of this initiatives component will be completed by the ARP Initiative Coordinator. The development will be completed in cooperation with local businesses, contractor organizations, and government entities.

This component will include:

 Promulgation of a BOH regulation to implement an ARP Contractor

- Certification program (recommended language attached)
- Development of a free training course to include the identification and abatement of vermiculite/asbestos
- Completion of a refresher course every two years
- Maintenance of a list of ARP certified contractors

Proposed Enforcement

Violations regarding the requirement to operate with an ARP contractor certification will be referred to the County Attorney's Office for enforcement.

Budget Considerations

- Staff Resources: 0.2 FTE
- Other Budget Items: advertising for certification requirements; development/printing training materials and certificates; and GIS/database for tracking certification information.

Asbestos Resource Program
City / County Board of Health

Office: 406-283-2462 E-mail: ARP@libby.org

ARP CONTRACTOR CERTIFICATION INITIATIVE (I:3)

Future Development

No future development is proposed for this component at this time.

Effectiveness Criteria

As part of the annual review of the ARP, the effectiveness of this component will be evaluated using:

- Statistics on numbers of certificates issued and enforcement actions taken
- Random inspections of regulated activities to determine compliance rates
- Tracking of projects called into UDIG, and identification of the party completing the work to determine compliance rate
- Periodic surveys (web or personal contact-based) of contractors and other applicable parties to assess the use and satisfaction of this component

Asbestos Resource Program City / County Board of Health

Office: 406-283-2462 E-mail: <u>ARP@libby.org</u>

ARP CONTRACTOR CERTIFICATION INITIATIVE (I:3)

The following recommendation is provided regarding new regulations to be promulgated by the City/County Board of Health for Lincoln County, as part of the Asbestos Resource Program (*ref.* Initiative I:2).

RECOMMENDATION NO. 1

ASBESTOS RESOURCE PROGRAM (ARP) REGULATIONS

III. CONTRACTOR CERTIFICATION

- A. <u>Certification Required</u>: It shall be unlawful for any person for hire to excavate, construct, demolish or renovate a property within the ARP District unless that person holds a valid ARP contractor certification.
- B. <u>Certification Requirements</u>: ARP contractor certification shall be granted upon completion of the following:
 - 1. Submission of an application form with the name, address, and telephone number of the applicant;
 - 2. Attendance at a training course provided by the ARP, not to exceed two (2) hours; and
 - 3. Passing the required examination.
- C. <u>Certification Term</u>: ARP contractor certifications shall be valid for two (2) years from the date of issuance, and are non-transferrable.
- D. <u>Certification Property and Revocation</u>: ARP contractor certifications shall be the property of the ARP, and may be revoked by the ARP at any time. The ARP shall notify the person by certified mail that the ARP contractor certification has been revoked, and list the reasons for revocation, which may include:
 - 1. Conducting excavation, construction, demolition, or remodeling activities without a permit;

- 2. Conducting excavation, construction, demolition, or remodeling activities in a manner that poses a threat to public health; or
- 3. Having provided false evidence of information to obtain a permit for excavation, construction, demolition, or remodeling activities.
- E. <u>Certification Reinstatement</u>: Revoked certifications may be reinstated after completing the requirements for ARP contractor certification.
- F. <u>Penalties</u>: Any person who violates any provision of this regulation shall, upon conviction, be punished by a fine not less than Ten Dollars (\$10.00) dollars and not more than Two Hundred Dollars (\$200) for each offense. Each day of violation shall be considered a separate offense.
- G. <u>Effective Date</u>: The requirements of this regulation shall be effective one (1) year after the date of adoption by the City/County Board of Health for Lincoln County.

END OF RECOMMENDATION NO. 1

OPEN SPACE RECREATION INITIATIVE (1:4)

An initiative to encourage open space recreational areas, while at the same time reducing potential exposure to LA asbestos by paving or hardscaping high use areas.

Purpose

The ARP Open Space Recreation Initiative is designed to:

- Apply within the boundaries of the ARP District (see Initiative I:2)
- Encourage the development of new and existing open space and recreational areas in a manner that prevents or reduces exposure to asbestos
- Promote appropriate trail coverage to prevent and/or reduce the generation of dust on new and existing trail systems

Implementation Strategy

The development and implementation of this initiatives component will be in part completed by the ARP Initiative Coordinator and staff in cooperation with local government entities.

This component will include:

 A resolution by the BOH to encourage the development of new and existing open space and recreation areas in a manner that prevents and/or reduces exposure to asbestos (recommended language attached). Assessment of existing trail systems to determine which of the most commonly used trails do not currently have trail coverage

Budget Considerations

- Staff Resources: 0.1 FTE for creation of program and tracking implementation
- Other Budget Items: Resources to provide paving or hardscape coverage of new or existing trail systems to be provided in conjunction with Resources R:1 and R:2

Effectiveness Criteria

As part of the annual review of the ARP, the effectiveness of this component will be evaluated using:

- Statistics on number of projects completed and miles of trails paved or hardscaped
- Track usage of new trail systems through public surveys or other tracking systems

Asbestos Resource Program City / County Board of Health

Office: 406-283-2462 E-mail: ARP@libby.org

OPEN SPACE RECREATION INITIATIVE (I:4)

The following recommendation is provided regarding a new resolution to be promulgated by the City/County Board of Health for Lincoln County, as part of the Asbestos Resource Program (*ref.* Initiative I:2).

RECOMMENDATION NO. 1

RESOLUTION NO. 2013-002

WHEREAS, the City/County Board of Health for Lincoln County (Board of Health) was created as the Local Board of Health for Lincoln County by an Inter-local Agreement between the City of Libby and Lincoln County with authority under Mont Code Ann. § 50-2-166(2)(c)(v)(A) to enact public health regulations to protect public health, safety, and welfare and to facilitate Institutional Controls selected by the United States Environmental Protection Agency (USEPA) for the Libby Asbestos Superfund Site;

WHEREAS, the Board of Health finds there is a threat to public health, safety, and welfare posed by the environmental conditions that lead the USEPA to designate the Libby Asbestos Superfund site;

WHEREAS, the Board of Health has received a grant expiring on December 31, 2016 from the USEPA to allow for the development, adoption, implementation, and enforcement of the Asbestos Resource Program regulations to be used as interim Institutional Controls for the Libby Asbestos Superfund Site, with the goal of reducing the risk of the public's exposure to asbestos; and

WHEREAS, unless otherwise extended by the Board of Health, this Resolution shall expire on January 1, 2017.

BE IT THEREFORE RESOLVED the Board of Health encourages the development of new and existing open space and recreational areas in a manner that prevents and/or reduces the public's exposure to asbestos. The Board of Health hereby directs the Staff of its Asbestos Resource Program to assess the existing public trail systems within the Asbestos Resource Program and annually report which of the most commonly used trails do not currently have trail coverage and provide recommendations for ranking those trails for upgrading with available grant funds from the USEPA.

DONE IN SESSION this 9th day of January, 2013.

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	END OF R	ECOMMEND	OA'TION NO. 1	

BAN VERMICULITE SALES INITIATIVE (I:5)

Ban future sales of vermiculite or soil containing vermiculite.

Purpose

The Ban Vermiculite Sales Initiative is designed to reduce future concerns and unnecessary confusion as to asbestos contamination and will:

- Apply within the boundaries of the ARP District (see Initiative I:2)
- Ban commercial sales of vermiculite and soil containing vermiculite

Implementation Strategy

The development and implementation of this initiatives component will be completed by the ARP Initiative Coordinator and staff in cooperation with local government and retail businesses.

This component will include:

- Promulgating a BOH regulation to ban the sale of vermiculite and soil containing vermiculite (recommended language attached)
- Development of informational resources and materials (e.g., fact sheets for customers) to provide to local retailers regarding alternatives to vermiculite (e.g., perlite)

 Outreach to retailers in surrounding communities to inform and distribute similar resources and materials to reduce purchases of vermiculite

Proposed Enforcement

Violations of the ban on the sale of vermiculite and soil containing vermiculite will be referred to the County Attorney's Office for enforcement.

Budget Considerations

- Staff Resources: 0.1 FTE
- Other Budget Items: development, printing, and dissemination of resources and informational materials

Effectiveness Criteria

As part of the annual review of the ARP, the effectiveness of this component will be evaluated using:

- Statistics on enforcement actions taken
- Random inspections of stores to determine compliance rates

Asbestos Resource Program
City / County Board of Health

Office: 406-283-2462 E-mail: ARP@libby.org

BAN VERMICULITE SALES INITIATIVE (I:5)

 Evaluating the number of ERS calls where vermiculite is encountered in gardens

Asbestos Resource Program City / County Board of Health

Office: 406-283-2462 E-mail: <u>ARP@libby.org</u>

BAN VERMICULITE SALES INITIATIVE (I:5)

The following recommendation is provided regarding new regulations to be promulgated by the City/County Board of Health for Lincoln County as part of the Asbestos Resource Program (*ref.* Initiative I:2).

RECOMMENDATION NO. 1

ASBESTOS RESOURCE PROGRAM (ARP) REGULATIONS

IV. BAN ON SALE OF VERMICULITE

- A. Prohibitions: No person shall conduct the following activities within the ARP District:
 - 1. Sell or offer for sale vermiculite or soil containing vermiculite.
- B. Notice of Violation: If the ARP staff or the County Public Health Officer or a Deputy County Public Health Officer determines that a violation of this regulation has been committed, the County Public Health Officer or a Deputy County Public Health Officer shall present a written Notice of Violation by certified mail. The Notice of Violation shall specify the violation, measures required to abate the violation, and a time for completing the abatement. If the person violating this regulation refuses or neglects to comply with the Notice of Violation, the County Public Health Officer or a Deputy County Public Health Officer shall request that legal action be taken against the violator by the County Attorney.
- C. <u>Penalties</u>: Any person who violates any provision of this regulation shall, upon conviction, be punished by a fine not less than Ten Dollars (\$10.00) dollars and not more than Two Hundred Dollars (\$200) for each offense and is subject to an injunction to prohibit future violations of this regulation. Each transaction or day of violation shall be considered a separate offense.
- D. <u>Effective Date</u>: The requirements of this resolution shall be effective six (6) months after the date of adoption by the City/County Board of Health for Lincoln County.

END OF RECOMMENDATION NO. 1

PUBLIC NUISANCE INITIATIVE (1:6)

Adopt a public nuisance regulation to require an ARP permit and prohibit activities that have the potential to expose the public to asbestos.

Purpose

The Public Nuisance Initiative is designed to:

- Apply within the boundaries of the ARP District (see Initiative I:2)
- Provide a mechanism to enforce the provisions of the ARP and prohibit activities that have the potential to expose the public to asbestos

Implementation Strategy

The development and implementation of this initiatives component will be completed by the ARP Initiative Coordinator and staff in cooperation with local government entities.

This component will include:

- Promulgating a BOH regulation to require an ARP permit and prohibit activities that have the potential to expose the public to asbestos (recommended language attached)
- An awareness campaign to ensure the public is aware of the regulation

Proposed Enforcement

The regulation will include a mechanism for enforcing the provisions of the ARP.

Budget Considerations

- Staff Resources: 0.2 FTE
- Other Budget Items: awareness campaign advertising

Future Development

Considerations for future development may include:

- Providing funding for cameras at the Libby and Troy landfills which would provide enhanced enforcement capabilities
- Develop dust air quality standards

Effectiveness Criteria

As part of the annual review of the ARP, the effectiveness of this component will be evaluated using:

 Statistics on numbers of enforcement actions taken

Asbestos Resource Program
City / County Board of Health

Office: 406-283-2462 E-mail: ARP@libby.org

Website: http://www.lincolncountymt.us/environmentalhealth/Asbestos.html

PUBLIC NUISANCE INITIATIVE (1:6)

- Random inspections of applicable activities being conducted to determine compliance rates
- Periodic surveys (web or personal contact-based) of contractors and other applicable parties to assess the use and satisfaction of this component

Asbestos Resource Program
City / County Board of Health

Office: 406-283-2462 E-mail: <u>ARP@libby.org</u>

Website: http://www.lincolncountymt.us/environmentalhealth/Asbestos.html

PUBLIC NUISANCE INITIATIVE (I:6)

The following recommendation is provided regarding new regulations to be promulgated by the City/County Board of Health for Lincoln County as part of the Asbestos Resource Program (*ref.* Initiative I:2).

RECOMMENDATION NO. 1

ASBESTOS RESOURCE PROGRAM (ARP) REGULATIONS

V. PUBLIC NUISANCE

- A. <u>Prohibitions</u>: No person shall cause or allow to exist on their property any of the following Public Nuisances within the ARP District:
 - 1. The excavation, generation, storage, deposition, accumulation, processing, or disposal of ACM without a permit issued by the ARP.
 - 2. Activities or conditions that create an imminent and substantial threat to expose the public to asbestos or ACM.
- B. <u>Powers of the ARP</u>: The ARP staff, including the County Health Officer and Deputy Public Health Officers shall have the following powers and duties:
 - 1. To inspect when there has been sufficient complaint that a violation of this regulation has occurred.
 - 2. To suggest to the City/County Board of Health for Lincoln County further applicable standards by which to enforce this regulation.
 - 3. To determine whether or not this regulation applies after inspection of the property or area.
 - 4. To send a written notice of violation to the owner of the property in violation of this regulation.
 - 5. To assess the property owner for the actual cost of abatement incurred by the ARP.

- C. <u>Notification of Violation</u>: Once a reliable complaint from the public has been received or the ARP staff otherwise becomes aware of the existence of a Public Nuisance as defined herein, the ARP staff, including the County Health Officer and Deputy Public Health Officers, shall:
 - 1. Inspect the property or area complained of and determine whether there exists such a Public Nuisance in violation of this regulation.
 - 2. Where a violation of this regulation is found, notify the owner of the property and/or or the person responsible for the violation in writing. This notice shall be sent by certified mail or hand delivered. This notice shall include a statement specifically describing the violation, and specify the amount of time provided to come in compliance with this regulation and the potential consequences of noncompliance as provided by state law.
 - 3. The owner may after receiving notification of violation submit in writing a plan of abatement to the ARP which shall include: 1) the type of abatement; 2) the date for commencement of abatement; and 3) the reason why abatement cannot be started within the amount of time specified in the notice of violation. The ARP may accept such plan and defer further proceedings under this regulation pending abatement.
 - 4. At the conclusion of the time frame specified by the notice of violation or as the ARP director otherwise deems in the interest of public health, the ARP director shall determine whether the violation has been abated by the owner or other responsible person.
 - 5. If the property owner or other responsible person fails to abate the Public Nuisance the Public Health Officer may issue an administrative order allowing ARP staff and agents to enter upon the property on which the Public Nuisance is maintain as public officers for purpose of abating the nuisance as provided by Mont. Code § 27-30-204.
- D. Penalties for Failure to Abate: Any person who fails to abate a Public Nuisance as required hereunder shall be liable for the costs of abatement including legal costs and shall be liable for the penalties for the maintenance of public nuisances as provided by state law, including but not limited to Mont. Code Ann. § 27-30-201 et seq. and § 45-8-111. The ARP staff or the County Health Officer or Deputy Public Health Officers may refer all failures to abate to the County Attorney for prosecution under this regulation and state law.

END OF RECOMMENDATION NO. 1

APPENDIX D

BACKGROUND



APPENDIX D. SITE BACKGROUND

Vermiculite in the Rainy Creek complex was mined near Libby, Montana from the 1920's to 1990. The vermiculite was primarily used as insulation in homes, an agricultural soil conditioner, packaging material, and in the manufacturing of wallboard. The Rainy Creek complex vermiculite contains LA asbestos, which is a combination of amphibole asbestos fibrous minerals. Over 6-million tons of vermiculite were mined from the Rainy Creek complex, processed, and shipped off site to over 200 facilities nationwide (USEPA 2011).

Studies in the 1980's and 1990's identified adverse health effects in workers associated with vermiculite mining and processing activities. Asbestos-related diseases were observed in both the worker and community populations around Libby, Montana. As a result of local health concerns, the USEPA began investigating former mining communities near Libby in 1999. Investigations included collection of air, soil, dust, and insulation samples from homes and businesses to assess the levels of asbestos contamination. As a result of the USEPA's initial investigation, as well as reports of adverse health effects, the Site was added to the USEPA NPL in 2002 as the Libby Asbestos Site (USEPA 2000).

The primary constituent of concern for the Site is the asbestos found in the Rainy Creek vermiculite deposits. Asbestos is a naturally occurring mineral that can be divided into two main categories: serpentine and amphibole. Although not all vermiculite contains asbestos fibers, mineralogical studies of the Site have discovered that several types of amphibole asbestos are present in the Rainy Creek complex vermiculite deposit. The USEPA refers to the mixture of amphibole asbestos types in the vermiculite as LA asbestos. The USEPA has reported LA asbestos to be a unique and relatively uncommon form of asbestos that is likely more toxic than other forms of asbestos (USEPA 2012).

In general, asbestos exposure in humans may have both non-carcinogenic (i.e., non-cancerous) and carcinogenic (i.e., cancerous) health effects. Carcinogenic effects include lung cancer and mesothelioma, while non-carcinogenic effects include asbestosis and pleural anomalies (USEPA 2012). The most common route of exposure for asbestos is inhalation, but asbestos can also be ingested. A toxicity study specific to LA asbestos has been drafted by the USEPA and is in final scientific review at this time (USEPA 2011).

APPENDIX E

LUR REPORT AND ABE REPORT CONSIDERATIONS



The following recommendations were provided in previous reports and were considered during the development of this report. Not all recommendations were incorporated into this report.

Land Use Restrictions Report Summary

The Land Use Restrictions (LUR) Report (Trihydro 2012a) was prepared for the BOH in order to evaluate the existing LURs and their applicability toward developing the ARP. The laws, ordinances, regulations, codes, resolutions, and guidance reviewed for the LUR report include the following:

- Lincoln County Ordinances (paper copy maintained by Lincoln County Clerk and Recorder's Office).
- Lincoln County Subdivision Regulations amended January 20, 2010.
- Citizens' Guide to Land Subdivision in Lincoln County, Lincoln County Planning Department, October 16, 2009.
- Lincoln County Air Quality Ordinance, Chapter 1, Revised October 8, 2008.
- Lincoln County General Health Regulations, Chapter 2.
- Lincoln County Landfill Fees, current.
- Lincoln County Community Decay Regulations, Chapter 4.
- Lincoln County Board of Commissioners Resolution Related to Asbestos, Resolution No. 538, March 7, 2000.
- Lincoln County Board of Health Wastewater Treatment and Disposal Regulations No. 3, revised June 1, 1993.
- City of Libby Subdivision Regulations, adopted November 21, 2011.
- City of Libby Control of Air Pollution Ordinance, Chapter 8.12.
- City of Libby, Ordinance No. 1353, Providing for Placing Restrictions on the Use of Groundwater.
- City of Libby, Building Codes, Chapter 14.02.
- City of Libby, Building Permit Application Package.
- City Code of Troy, updated August 17, 2011.
- Montana Asbestos Control Act, Montana Department of Environmental Quality, Chapter 74, Subchapter 3.
- Montana Department of Transportation Highway Approach, Encroachment/Occupancy permits and addendum.
- United States Forest Service, Kootenai National Forest, Firewood Cutting and Christmas Tree Cutting Requirements.

- Department of Natural Resources and Conservation Firewood Cutting and Christmas Tree Cutting Permit Guide.
- Occupational Safety and Health Administration, Asbestos, 29 CFR 1910.1001 and 1926.1101.

In 2000, the Lincoln County Commissioners passed a resolution relating to asbestos. Resolution No. 538 (March 7, 2000) resolves to investigate the nature and extent of adverse impacts of asbestos, the need for governmental action, and the available financial resources to respond to any endangerment. Although resolutions are generally non-binding and do not impose regulatory requirements, they provide a mechanism for communicating the governing body's commitment to a particular issue. The BOH's development of the ARP confirms the Lincoln County Commissioners commitment to address environmental conditions associated with asbestos as described in Resolution No. 538. Unfortunately, this is one of the few county or city references to asbestos in the community at this time.

The following information summarizes LURs currently being implemented by Lincoln County, the City of Libby, and the City of Troy, and the considerations provided in the LUR report to aid in development of the initiatives portion of the ARP.

- Subdivision regulations for Lincoln County and the City of Libby require the developer to perform
 due diligence, conduct a pre-application meeting with the Planning Department, complete the
 Environmental and Community Assessment process, and submit a Water & Sanitation Report on the
 proposed water supply systems. Consideration should be given to expanding the scope of each of
 these items to address potential LA asbestos exposures.
- Control of Air Pollution regulations for Lincoln County and the City of Libby address asbestos only in that open burning activities are not allowed to contain asbestos containing material, but are not specific to bark, wood, or duff that may contain LA asbestos. Following the establishment of inhalation toxicity values by the USEPA in 2013, consideration should be given to expanding the Control of Air Pollution regulations to include more LA asbestos requirements for burning (open and solid fuel), road sanding and sweeping, sand & gravel use and treatment, and air pollution contingency measures. Because the Control of Air Pollution regulations do not regulate activities outside of the Air Pollution Control District (district), it may be important in the interim to either expand the district or to recommend that the existing ordinances be utilized outside of the district as either best management practices or regulations.
- Wastewater Treatment and Disposal regulations for Lincoln County, implemented by the BOH, require a permit for all systems and licenses for installers; however, LA asbestos is not addressed. Consideration should be given to revising the regulations to ensure that installers of wastewater systems are aware of the potential to encounter LA asbestos during installation or modification activities, including a process if asbestos is encountered.
- Solid waste regulations for Lincoln County do not specifically address asbestos exposure; however, the Libby Landfill is permitted by the MDEQ to accept asbestos containing material including LA-asbestos. Consideration should be given to revising the solid waste regulations to ensure that the current case-by-case approval of burying solid waste will either exclude disposal of asbestos containing materials or impose requirements to control future exposures.

- Community Decay regulations for Lincoln County prohibit the accumulation of certain materials that
 interfere with the comfortable enjoyment of life or property in Lincoln County. Consideration should
 be given to revising the regulations to include prohibiting storage and stockpiling of asbestos and
 asbestos containing materials, as well as abandonment of decaying structures containing asbestos
 contamination.
- The City of Libby and Troy have established a building permit program to address building codes for new construction, modifications/remodeling, and demolition. The building permits provide information on the Montana Asbestos Control Act, but do not specifically address the potential for LA asbestos exposure or require asbestos inspections prior to approval. Consideration should be given to revising this program to address potential LA asbestos exposure and including an approval or inspection component through the ARP. Consideration should also be given to expanding the program beyond the cities' limits to be consistent with the APR district.
- Aside from the City of Libby, well installation and water rights are regulated by the Montana Department of Natural Resources and Conservation (DNRC), and do not specifically address potential LA-asbestos exposure during installation or drilling activities. However, water wells in Montana must be installed by a water well driller licensed by the DNRC. Consideration should be given to assisting the DNRC in disseminating information on LA asbestos as part of the water well driller licensing program. Within the City of Libby, an ordinance prohibits drilling of new wells for domestic or irrigation purposes but does allow drilling of wells for other uses, after obtaining a permit. Consideration should be given to revising the permit process to include information on the potential for encountering LA-asbestos during drilling and installation activities.
- The overruling Montana Asbestos Control Act regulates asbestos containing material (ACM) in all buildings with the exception of single-family homes occupied by the home owner and rental units with up to four units, whose owners do not own multiple rental properties. These regulations require inspections by an accredited inspector and proper handling of ACM during renovations, modifications, and demolition. Consideration should be given to the ARP forming a partnership with the state agency to ensure that the program addresses LA asbestos, including additional regulations for LA asbestos encountered during regulated remodels and demolitions. Program components specific to LA asbestos could be limited to the ARP district and should include the unregulated single-family home owners and small rental unit owners.
- Montana Department of Transportation (MDT) has established a special provision for highway approach and encroachment/occupancy permits along Highway 37 near the Site. The special provisions for Highway 37 from the Kootenai River Bridge to Rainey Creek notify applicants of the hazard of exposure to LA asbestos, and advise them to take appropriate precautions. The current permit system provides basic notification of the potential hazard, but consideration may be given to requiring a mitigation plan in the event that LA asbestos is suspected of being present.
- State and Federal lands within and near the Site contain United States Forest Service or Bureau of Land Management areas that are open to commercial and private logging and Christmas Tree cutting permits. Once the USEPA finalizes the toxicity values for the Site, consideration should be given to the ARP addressing these activities through the distribution of information on LA asbestos in conjunction with the permit process. Information could include recommended best management

practices to reduce potential risk of exposure from firewood cutting, timber cutting and processing, and tree/duff gathering activities.

Lastly, Occupational Safety and Health Act (OSHA) regulations provide protection against asbestos exposure to workers. OSHA requirements may be modified at the federal level once the USEPA releases the LA asbestos toxicity values. The BOH has no jurisdiction over federal OSHA regulations. Consideration should be given to the ARP assisting in the dissemination of any asbestos OSHA standards modified in the future. Consideration may also be given to utilizing the OSHA standards, to some degree, when developing LA asbestos exposure standards for the pubic or as a regulatory action level for activities generating airborne concentrations of LA asbestos.

Activity-Based Exposure Levels Report Summary

The Activity-Based Exposures (ABE) Levels Report (Trihydro 2012b) summarizes available toxicological and activity-based sampling findings, draft and final, that characterize exposure to LA asbestos. The report also provides considerations for risk and exposure reduction as part of the ARP, including:

- Request information from the USEPA regarding the pending Site risk assessment and the comparative
 exposure analysis, which will have implications for the BOH's understanding of risk for the
 communities located within the Site. The request could include, but is not limited to, the following
 issues:
 - Site Risk Assessment
 - The rationale for using the data from the ABS, ambient air monitoring, and the nature and extent studies in the risk calculations.
 - The process used to evaluate cumulative risk.
 - The anticipated actions to monitor and review risk (activity-based and cumulative) during and after remedy implementation.
 - Comparative Exposure Analysis
 - The scope of work for expanding the comparative ambient air analysis in Eureka, Helena, and Whitefish.
 - The rationale for using Eureka, Helena, and Whitefish, versus other communities that may not be downwind of the Site.
 - Methodologies used to compare and contrast the carcinogenic and non-carcinogenic toxicity data for LA asbestos and non-LA asbestos.
 - The implications of the comparative exposure analysis on the characterization of risk at the Site.
- Revise existing or develop new land use restrictions to address LA asbestos exposure activities associated with higher potential exposures and risks such as the following:
 - Expand the building permit program, promote UDIG program, and provide residents with resources to understand potential exposures associated with excavations.

- Expand air pollution/dust control ordinances to incorporate paved road cover or dust control measures for potentially higher risk areas (e.g., City of Troy roads, alleys, and parking areas; recreational access around the mine site; and recreational paths/sidewalks).
- Create licensing or certification programs for workers who are at greater risk for exposure, such
 as: outdoor construction workers near or at the former Stimson Lumber Mill area; landscaping
 companies that mow, disturb surficial soils, or excavate deeper soils; and outdoor jobs that
 require all-terrain-vehicle (ATV) use on trails around the Kootenai River Valley.
- Develop public resources and outreach programs to promote awareness of potential exposure and risks associated with higher LA asbestos exposure activities such as the following:
 - Heavy machinery operators.
 - Gardening/landscaping-related businesses, garden material suppliers, and local residents to increase exposure awareness (i.e. seasonal effects, materials selection, testing, etc.) with gardening and landscaping activities.
 - Recreational users of paved and off-road trail systems.
 - Recreational users in or around Zonolite Mountain, also known as the mine site, or other natural vermiculite deposit outcrops.
- Develop public resources and outreach programs for potentially sensitive populations, such as young children and immune-compromised individuals, to promote life-long LA asbestos exposure awareness and prevention.

APPENDIX F

RESPONSES TO PUBLIC COMMENTS



APPENDIX F. PROPOSED ARP RESPONSES TO PUBLIC REVIEW COMMENTS

Lincoln County Department of Environmental Health (K. Lind)

1. Consider renaming R:9 to "Prescription Information Assistance."

Response: The title for Resource Component 9 (R:9) has been revised to "Prescription Information Assistance" to clarify the intent of this component.

2. Table 2-1: Consider including MSHA in existing LURs

Response: This table is directly from a previous report (Land Use Restrictions Report). MSHA regulations/requirements will be considered during ARP development and future development. However, the table will not be updated as it is a direct reference to a table used in a previous document.

MDEQ (J. Podolinsky)

 Section 2.1: DEQ does not agree with the statement made in the second to last sentence of the second paragraph (The USEPA has determined that it is not technically feasible to remove all of the LA asbestos at the Site.). MDEQ does not believe EPA has fully determined/proved this yet.

Response: The report text has been revised to clarify the intent of this statement.

2. Table 2-1 and Appendix E: Consider including MSHA and Department of Labor within existing LURs.

Response: This table and appendix are directly from a previous report (Land Use Restrictions Report). MSHA and DOL regulations/requirements will be considered during ARP development and future development. However, the table will not be updated as it is a direct reference to a table used in a previous document.

3. Consider using "accredited and licensed" when referring to state accredited and licensed asbestos works (inspectors, contractor/supervisor, etc.).

Response: The current Montana DEQ Asbestos Control Program uses the term "accredited" for a trained individual that the Program has approved for performing asbestos-related work in Montana. To avoid confusion, the term "licensed" will not be used and the ARP will continue to use terminology consistent with the Asbestos Control Program.

CDM Smith (D. Pisciotta)

 Suggest extending the permit notification requirement to 10 business days for all projects being completed by a contractor (both residential and non-residential). This will allow for additional time coordinating with ERS and scheduling any resulting Quick Response activities.

Response: In order to achieve a high compliance rate at the onset of the program, the permit lead-time/notification requirements will remain as originally proposed. This will provide flexibility for individual property owners. Notification requirements will be evaluated once the program has been implemented and the proposed revisions will be considered during future program development.

APPENDIX F. PROPOSED ARP RESPONSES TO PUBLIC REVIEW COMMENTS

Lincoln County Planning Department (K. Smith)

- Under Budget Considerations for Update Codes/Ordinances, etc., on page one it states "staff resources 100 hours" - is that annually? One time? For the life of the program? Or what.
 - Response: The 100 hour time estimate is for updating the Codes/Ordinances one time.
- 2. Recommendation No.5, the recommended change to K. Additional Materials is unclear. It states "If ... provide a plan for the subdivider and individual lot owners ..." It is the subdivider's responsibility to provide all the materials on the submittal requirements list. This recommendation appears to suggest that the Subdivision Administrator needs to provide a plan for the subdivider. My question, which also relates to the corresponding item 10 on page 10 (Additional Materials) is shouldn't we have a standardized "plan for contacting the ARP if vermiculite [...] is encountered." If we just leave it up to the subdivider with no standard then you could have a spectrum of what passes as a "plan for contacting the ARP."

Page 9 - addition of question on pre-app form: "Have you obtained an ARP permit?" and if the answer is No - what should the Subdivision Administrator do? During the review process there is a period of time where various agencies and stakeholders that may be affected by a proposed subdivision are contacted for comment. Should ARP be added to this list?

Page 10 - item #8 on the preliminary checklist (water and sanitation). Prior to submittal of a subdivision application, the subdivider usually has to conduct soil tests for the wastewater treatment system (actual construction of the system is pushed off to the future owner) where they dig 8' trenches and analyze the soil suitability for wastewater. So, at the preliminary stage that is the potential exposure. Whereas, the construction of wells and septic systems, which fall to the lot owner, would have to be addressed in a property notification, or in the covenants, which would be filed with the final plat. At least, that would be my suggestion. And again, I think a standardized "plan to notify ARP" would be better.

Response: Initiative I:1 Recommendation No. 5 (Updates to Lincoln County Subdivision Regulations) has been revised based on the initial comments provided by K. Smith and follow-up discussions. The revisions are intended to simplify the updates and incorporate the Asbestos Resource Program into the appropriate steps of the subdivision process.

3. In the Public Nuisance Initiative (I:6) - V.B.5 is missing.

Response: There was a numbering issue in the updated Initiative text. This issue has been resolved for the final report text.

Lincoln County Attorney (B. Cassidy)

 Initiative I:2 - Consider adding citation to the proposed Resolution which provides Statutory Authority for Health Boards to adopt regulations as Institutional Controls

Response: The Resolution has been updated to include a reference to Mont Code Ann. § 50-2-166(2)(c)(v)(A)

APPENDIX F. PROPOSED ARP RESPONSES TO PUBLIC REVIEW COMMENTS

2. Initiatives I:2, I:3, and I:6 – Consider a phase-in period for the new ordinances to take effect over a given time period. This would provide a "grace period" for the community to become familiar with the requirements of the new ordinances.

Response: The ordinance language has been updated to include a phase-in period.

Public Meeting (December 28, 2012)

- 3. Public Comment 1 Commenter raised concern of the adequacy of public notice for the review/comment period and public meeting.
 - Response: Public notification for the proposed ARP review/comment period and public meeting was completed in accordance with standard practice. The review/comment period spans a 30-day timeframe running from December 7, 2012 through January 7, 2013. In addition to accepting written comments; the Board of Health hosted a public meeting on December 28, 2012 to receive verbal comments.
- Public Comment 2 Individual property/business owners should not have to pay for Operations and Maintenance associated with the Libby Asbestos Project.
 - Response: The Board of Health agrees that the public should not be responsible for funding the Asbestos Resource Program or O&M in general. The Board of Health will adopt the ARP contingent on USEPA providing sufficient funding to implement the program.
- 5. Public Comment 3 The Board of Health should address risks associated with using water from the Kootenai River, downstream of Rainy Creek, for irrigation.
 - Response: There is not sufficient data at this time to indicate a specific risk associated with utilizing water from the Kootenai River for irrigation purposes. When selecting locations for Ambient Air Monitoring (Education Component E:2), the ARP will consider locations known to be utilizing irrigation water from the Kootenai River. In addition, the ARP will consider the potential exposure pathway for future program development as new data becomes available.